



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

CAR 000 191 536
Part A • 2A-1

WASTE MANAGEMENT DIVISION
RCRA ENFORCEMENT OFFICE
RCRA COMPLIANCE EVALUATION INSPECTION REPORT

Purpose: RCRA Compliance Evaluation Inspection

Facility: Space Exploration Technologies

Location: 1 Rocket Road, Hawthorne, CA 90250

EPA ID Number: CAR 000 191 536

Date of Inspection: July 13, 2009

EPA Representatives: James Polek
RCRA Enforcement Officer
(415) 972-3185

Kaoru Morimoto
RCRA Enforcement Officer
(415) 972-3306

Christopher Rollins
RCRA Enforcement Officer
(415) 947-4166

Facility Representative: Bill Woolley
Safety Engineer
(310) 363-6645
(310) 363-6001 (Fax)
william.woolley@spacex.com

Report Prepared By: James Polek

Report Date: August 24, 2009

Introduction

On July 13, 2009, U.S. Environmental Protection Agency (EPA) representatives conducted an unannounced site inspection of the Space Exploration Technologies (SpaceX) facility in Hawthorne, CA. The purpose of the inspection was to determine SpaceX's compliance with applicable federal environmental statutes and regulations, and in particular, the Resource Conservation and Recovery Act (RCRA), as amended, the regulations provided in the Code of Federal Regulations (CFR), Chapter 40, Parts 261-265, 268, and 279, and the California Code Regulations (CCR), Title 22, Division 4.5 and the California Health and Safety Code, Division 20.

The inspectors conducted a physical inspection of the facility and reviewed records related to SpaceX's hazardous waste management practices. This inspection report summarizes the events that transpired during the inspection, observations made by the inspectors, and materials received by the facility after the inspection.

Facility Background

Facility Name	Space Exploration Technologies
Established	2002; at current location since November 2007
Number of Employees	600
Facility Size	500,000 square feet
Hours of Operation	Portions of facility are 24/7
Filed Notification of Hazardous Waste Activity	April 17, 2008
Facility Processes	SpaceX designed and is manufacturing a launch vehicle for placing satellites into orbit and for delivering cargo to the international space station. The company is currently transitioning from a research and development company to a manufacturing company. SpaceX designed and is manufacturing the liquid-fuel rocket that powers the launch vehicle as well as the avionics throughout the vehicle.
Waste Streams	Waste alodine (D002, D007), waste acetone (F003), waste isopropyl alcohol and phenol (D001), waste rocket propellant (D001), paint waste (D001, F003, F005), waste resin and epoxy (D001), waste Pasa Jell (D002, D007), waste etch (D002), magnesium chips in oil (D001, D003), machine shop coolant (CA 223), waste filters (CA 352), spent lamps and batteries (universal waste)
Generator Status	Large Quantity Generator (LQG)
Last Inspection	According to EPA's RCRAInfo database, a RCRA compliance evaluation inspection has never been conducted at this SpaceX location.

Facility Inspection

The inspectors were given a tour of the facility by Mr. Bill Woolley. The following tables summarize the areas inspected and the potential violations found in the satellite accumulation areas (SAA) and the hazardous waste storage area.

Area 1: Hazardous Waste Storage Area – Potential Violations

Location	Container Type	Waste Type	Potential Violation	Photo
Hazardous Waste Storage Area	1 30-gallon container with accumulation start date (ASD) of 3/13/09	Waste acetone (D001)	Storage for >90 days; Incomplete label	1-A
	1 55-gallon container	Waste alodine (D002, D007)	Incomplete label	
	1 350-gallon tote (see comment)	Waste coolant (CA 223)	None	
	2 cubic yard boxes	Dirty floor mats and rags awaiting laundry service	None	
	1 cubic yard box	2 garbage bags of hysol glue (resin) (D001)	No ASD	
	1 cubic yard box	Machine shop filters (CA 352)	No label	
	1 55-gallon container with ASD of 4/24/08	Waste isopropyl alcohol (D001)	Storage for >90 days; Open container; Incomplete label	1-B
	1 55-gallon container with ASD of 1/20/09	Waste alodine rags (D007)	Storage for >90 days	1-C
	1 2-gallon container in flammable materials cabinet	Unknown	No label; Open container	
	1 30-gallon container	Pasa Jell acidic waste (D002, D007)	Incomplete label	1-D

	2 55-gallon containers	Waste paint lab packs (D001, F003, F005)	Incomplete labels	
Hazardous Waste Storage Area (cont)	3 cardboard boxes	Universal waste lamps	One open box; Two boxes no label	
	1 55-gallon container	Spent acidic batteries (universal waste)	None	
	1 30-gallon container	Spent alkaline batteries (universal waste)	None	
	1 30-gallon container	Paint waste (D001)	None	
	1 5-gallon container with ASD 11/16/08	Acid etch waste (D002)	Storage for >90 days	1-E
	1 5-gallon container	Waste acid awaiting waste determination	None	
	1 55-gallon container	Waste rocket propellant (RP-1) (D001)	No label	
	1 30-gallon container	Waste aerosol cans (D001)	No label	

Comments: Liquid was present in the secondary containment of the tote, which means that the secondary containment was actually an open container of non-RCRA hazardous waste coolant (CA 223). The hazardous waste storage area lacks aisle space between containers to allow for inspection of the containers (Photos 1-F and 1-G).

Area 2: Deburring Area – Potential Violations

Location	Container Type	Waste Type	Potential Violation	Photo
Outside Deburring Area	1 20-gallon flammable materials container	Oily rags	No label	

Comments: The containers of oily rags throughout the facility need to have hazardous waste labels. None of the containers observed during the inspection were labeled properly.

Area 3: PICA Lab – Potential violations

Location	Container Type	Waste Type	Potential Violation	Photo
Inside Lab	1 20-gallon flammable materials container	Rags with PICA solution (D001)	Incomplete label	
	1 24-ounce container	Waste resin (D001)	No label; Open container	3-A
	1 5-gallon container	Glycol saturated waste (CA 223)	No label	
Outside Lab	350-gallon tote	Empty	None	

Comments: The tote outside the lab receives waste during production runs. The facility representative indicated that lab personnel label the tote when production begins.

Area 4: Avionics – Potential violations

Location	Container Type	Waste Type	Potential Violation	Photo
Avionics Area	1 14-gallon flammable materials container	Label stated “Hazardous Materials Only”	Incomplete label	4-A
	1 5-gallon flammable materials container	Label stated “FOD – Foreign Object Debris”	Incomplete label	4-A
Clean Room	1 14-gallon flammable materials container	Label stated “Hazardous Materials Only”	Incomplete label	
	1 5-gallon flammable materials container	Label stated “FOD – Foreign Object Debris”	Incomplete label	

Comments: The inspectors explained to the facility representative that the container labels

needed to be changed to hazardous waste labels if they indeed were used for hazardous waste. Containers throughout the facility used this labeling methodology, so the facility needs to modify labels on these containers as well, as appropriate.

Area 5: Structures Testing – Potential Violations

Location	Container Type	Waste Type	Potential Violation	Photo
Structures Testing Area	1 5-gallon container	Used hydraulic oil	Open Container; No label	
	1 20-gallon flammable materials container	Oily rags	No label	

Comments: None

Area 6: Composite Finishing – No Violations

Location	Container Type	Waste Type	Potential Violation	Photo
Composite Finishing	None	None	None	

Comments: The composite material is cured, so no hazardous waste is generated in this area.

Area 7: Spin-Form Area – Potential Violations

Location	Container Type	Waste Type	Potential Violation	Photo
Spin-Form Area	1 5-gallon container	Label indicated “Alodine only”	Need waste determination	7-A

Comments: None.

Area 8: Machine Shop – Potential Violations

Location	Container Type	Waste Type	Potential Violation	Photo
EDM Area	None	None	None	
Lathe and Mill Area	3 14-gallon flammable materials containers	Oily Rags	No labels; One open container	
	1-gallon pan	Cutting oil	Need waste determination	8-A
	1 5-gallon container	Spent way lube	No label	
	1 5-gallon container	Unknown	Need waste determination	

Comments: None.

Record Review

Reviewed the following records:

- Manifests from 2007 through 2009
- Land Disposal Restriction (LDR) Notifications
- Biennial Reports
- Contingency Plan
- Training Plan
- Training Records
- Inspection Log.

The 2007 manifests and LDR notifications were from Spacex's previous location and some did not have a final signed copy. Spacex did not manifest hazardous waste from their current location until 2008. No LDR notifications were available for their current location.

The 2007 Biennial Report was not prepared for the current location because Spacex was not an LQG at this location in 2007. However, Spacex is now an LQG and they will need to file a 2009 Biennial Report by March 1, 2010 for their current location.

The contingency plan needed to include arrangements with emergency responders and needed to include descriptions and locations of emergency equipment throughout the facility.

The facility had training records for Mark Drop, the employee responsible for the hazardous

waste storage area. The facility did not have a training plan that indicates employee job descriptions and training required for those employees responsible for managing hazardous waste.

The facility representative indicated that the 90-day hazardous waste storage area was inspected daily, and that the inspections were only documented quarterly.

Potential Violations of RCRA Hazardous Waste Requirements

1. Storage of hazardous waste without a permit 22 CCR §66270.1(c) [40 CFR §270.1(c)]. Failure to store hazardous waste for less than the 90 day limit allowed LQGs, 22 CCR §66262.34(a) [40 CFR §262.34(a)].

Requirements:

22 CCR §66270.1(c) requires that each person owning or operating a facility where hazardous waste is transferred, treated, stored, or disposed must have a permit. However, LQGs may accumulate hazardous waste on-site for 90 days or less without a permit provided that the waste is properly contained, labeled, and managed, as defined in California regulation 22 CCR §66262.34(a).

Findings:

The following containers in the Hazardous Waste Storage Area were stored for longer than 90 days:

- One 30-gallon container of waste acetone (D001) with ASD of 3/13/09
- One 55-gallon container of waste isopropyl alcohol (D001) with ASD of 4/24/08
- One 55-gallon container of waste alodine rags (D007) with ASD of 1/20/09
- One 5-gallon container of acid etch waste (D002) with ASD 11/16/08.

Facility Response:

On July 21, 2009, Spacex emailed photographs of the Hazardous Waste Storage Area and indicated that the waste was picked up that day.

2. Failure to label hazardous waste containers properly, 22 CCR §66262.34(f) [40 CFR §262.34(a)].

Requirements:

As stated in California regulation 22 CCR §66262.34(f)(1), generators who accumulate hazardous waste on-site without a permit shall have the date accumulation begins clearly marked, and visible for inspection, on each container. As stated in California regulation 22 CCR §66262.34(f)(3), each container must also be clearly marked with the words "Hazardous Waste," and labeled with the composition and physical state of the waste, hazardous properties, and facility name and address.

Findings:

Labels on the containers in the Hazardous Waste Storage Area were missing or incomplete:

- One 30-gallon container of waste acetone (D001) had an incomplete hazardous waste label.
- One 55-gallon container of waste isopropyl alcohol (D001) had an incomplete hazardous waste label.
- One 55-gallon container of waste alodine (D002, D007) had an incomplete hazardous waste label.
- One 55-gallon container with two garbage bags of hysol glue (resin) (D001) had a hazardous waste label with no ASD.
- One 2-gallon container of unknown material in the flammable materials cabinet (assumed to be D001 because it is in flammable materials cabinet) did not have a hazardous waste label.
- One 30-gallon container of Pasa Jell acidic waste (D002, D007) had an incomplete label.
- Two 55-gallon containers of waste paint lab packs (D001, F003, F005) had an incomplete labels.
- One 55-gallon container of waste rocket propellant (RP-1) (D001) had no hazardous waste label.
- One 30-gallon container of waste aerosol cans (D001) had no hazardous waste label.

Facility Response:

On July 21, 2009, Spacex emailed photographs of the Hazardous Waste Storage Area and indicated that waste was picked up that day. The waste remaining was properly labeled.

3. Failure to close hazardous waste containers, 22 CCR §66265.173(a) [40 CFR §265.173(a)].

Requirements:

As stated in California regulation 22 CCR §66262.34(a), generators may accumulate hazardous waste on-site for 90 days or less without a permit or grant of interim status, provided that the generator complies with the requirements in Article 9 of Chapter 15. As stated in Article 9 (22 CCR §66265.173(a)), a container holding hazardous waste shall always be closed during transfer and storage, except when it is necessary to add or remove waste.

Findings:

- One 55-gallon container of waste isopropyl alcohol (D001) in the Hazardous Waste Storage Area was left open.
- One 2-gallon container of unknown material in the flammable materials cabinet in the Hazardous Waste Storage Area had no lid.
- One 24-ounce container of waste resin (D001) in the PICA lab had no lid.

Facility Response:

On July 21, 2009, Spacex emailed a photograph of the empty flammable materials cabinet in the Hazardous Waste Storage Area and indicated that the waste was picked up that day.

4. Failure to maintain adequate aisle space in hazardous waste storage area, 22 CCR §66265.35 [40 CFR §265.35].

Requirements:

California regulation 22 CCR §66262.34(a)(4) indicates that a generator may accumulate hazardous waste on-site without a permit provided that the generator complies with the requirements in Article 3 of Chapter 15. As stated in Article 3 (22 CCR §66265.35), the owner or operator shall maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency.

Findings:

The lack of aisle space in the hazardous waste storage area limited the inspection of the hazardous waste containers.

Facility Response:

On July 21, 2009, Spacex emailed photographs of the Hazardous Waste Storage Area showing that it was organized with fewer containers than observed during the inspection and plenty of aisle space to allow for proper inspection of the containers.

5. Failure to label hazardous waste containers in satellite accumulation area, 22 CCR §66262.34(e)(1) [40 CFR §262.34(c)(1)].

Requirements:

As stated in California regulation 22 CCR §66262.34(e)(1), generators may accumulate as much as 55-gallons of hazardous waste at or near any point of generation provided that the initial date of waste accumulation is clearly marked and visible for inspection, and that the generator complies with subsection 22 CCR §66262.34(f)(3). Subsection 22 CCR §66262.34(f)(3) requires that the container be clearly marked with the words "Hazardous Waste," and the container is labeled with the composition and physical state of the waste, hazardous properties, and facility name and address.

Findings:

Labels on containers in the following SAAs were missing or incomplete:

- One 20-gallon flammable materials container of rags with PICA solution (D001) in the PICA lab had an incomplete hazardous waste label.
- One 24-ounce container of waste resin (D001) in the PICA lab had no hazardous waste label.
- Two 14-gallon flammable materials containers, one inside and one outside the Avionic's clean room, were labeled as "Hazardous Material Only."

- Two 5-gallon flammable materials containers, one inside and one outside the Avionic's clean room, were labeled as "FOD – Foreign Object Debris."
- Flammable materials containers (14-gallon Hazardous Material Only and 5-gallon FOD) throughout the facility have incomplete hazardous waste labels.

6. Failure to make a hazardous waste determination, 22 CCR §66262.11 [40 CFR §262.11].

Requirements:

As stated in California regulation 22 CCR §66262.11, a person who generates a solid waste must determine if that waste is a hazardous waste by using a three part method: a) check to see if the waste is excluded in 22 CCR §66261.4, b) verify if the waste is a listed hazardous waste in Articles 4 or 4.1 of Chapter 11, and c) determine if the waste is characteristically hazardous (see Article 3 of Chapter 11) by appropriate analytical methods or by knowledge of process.

Findings:

- A waste determination needs to be made on the contents of a 5-gallon container in the Spin-form Area marked as "Alodine only."
- Waste determinations need to be made on the contents of a 1-gallon pan of cutting oil and a 5-gallon container of unknown material in the Machine Shop.

7. Failure to maintain land disposal restriction records, 22 CCR §66268.7(a)(8) [40 CFR §268.7(a)(8)].

Requirements:

As stated in California regulation 22 CCR §66268.7(a)(8), generators shall retain on-site a copy of all notices, certifications, waste analysis data, and other documentation produced pursuant to this section for at least three years from the date that the waste that is the subject of such documentation was last sent to on-site or off-site treatment, storage, or disposal.

Findings:

Spacex did not have LDR notifications for hazardous waste shipped from their current location.

8. Failure to have a current contingency plan as required by 22 CCR § 66265.52 [40 CFR §265.52].

Requirements:

California regulation 22 CCR §66262.34(a)(4) indicates that an LQG may accumulate hazardous waste on-site for 90 days without a permit provided that the generator complies with the requirements in Article 4 of Chapter 15. As required in Article 4 (22 CCR §66265.52(c)), the plan shall describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to

coordinate emergency services. As required in Article 4 (22 CCR §66265.52(e)), the contingency plan shall include a list of all emergency equipment at the facility. This list shall be kept up to date. In addition, the plan shall include the location and a physical description of each item on the list, and a brief outline of its capabilities.

Findings:

SpaceX's contingency plan did not include arrangements with emergency responders and did not include descriptions and locations of emergency equipment throughout the facility.

9. Failure to have adequate training plan as required by 22 CCR § 66265.16 [40 CFR §265.16]

Requirements:

California regulation 22 CCR §66262.34(a)(4) indicates that an LQG may accumulate hazardous waste on-site for 90 days without a permit provided that the generator complies with the requirements in 22 CCR §66265.16. As required in 22 CCR §66265.16, facility personnel shall successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the hazardous waste regulations. Facility personnel shall have initial training within six months from employment and annual review of the training. The owner or operator shall maintain at the facility a job title for each position at the facility related to hazardous waste management, a written job description for each position at the facility related to hazardous waste management, and a written description of the type and amount of both introductory and continuing training given to personnel filling a position. The facility must also maintain records to document training provided to their personnel.

Findings:

SpaceX did not have a training plan for review at the time of inspection.

Potential Violations of non-RCRA, California-only Hazardous Waste Requirements

1. Failure to label hazardous waste containers properly, 22 CCR §66262.34(f).

Requirements:

As stated in California regulation 22 CCR §66262.34(f)(1), generators who accumulate hazardous waste on-site without a permit shall have the date accumulation begins clearly marked on the container and visible for inspection. As stated in California regulation 22 CCR §66262.34(f)(3), each container must also be clearly marked with the words "Hazardous Waste" and must be labeled with the composition and physical state of the waste, hazardous properties, and facility name and address.

Findings:

The hazardous waste containers in the following areas were not labeled with the above required information:

- The cubic-yard box of machine shop filters (CA 352) in the Hazardous Waste Storage Area.
- The 20-gallon flammable materials container of oily rags in the Deburring Area.
- The 20-gallon flammable materials container of oily rags in the Structures Testing Area.
- Three 14-gallon flammable materials container of oily rags in the Machine Shop.
- The 20-gallon and 14-gallon flammable materials containers used for oily rags throughout the facility.
- The 5-gallon container of glycol saturated waste (CA 223) in the PICA Lab.
- The 5-gallon container of used hydraulic oil in the Structures Testing Area.
- The 5-gallon container of spent way lube in the Machine Shop.

Facility Response:

On July 21, 2009, Spacex emailed a photograph of the cubic-yard box of waste machine shop filters in the Hazardous Waste Storage Area demonstrating that it had a complete hazardous waste label.

2. Failure to close hazardous waste containers in satellite accumulation area, 22 CCR §66265.173(a).

Requirements:

As stated in California regulation 22 CCR §66262.34(e), generators may accumulate as much as 55-gallons of hazardous waste at or near any point of generation provided that they comply with 22 CCR §66265.173(a). As stated in California regulation 22 CCR §66265.173(a), a container holding hazardous waste shall always be closed during transfer and storage, except when it is necessary to add or remove waste.

Findings:

- The secondary containment of the 350-gallon tote of waste coolant (CA 223) in the Hazardous Waste Storage Area contained liquid.
- The 5-gallon container of used hydraulic oil in the Structures Testing Area did not have a lid.
- One of the 14-gallon flammable materials containers of oily rags in the Machine Shop had a broken lid.

Facility Response:

On July 21, 2009, Spacex emailed a photograph of a used hydraulic oil container with a lid in the Structures Testing Area.

3. Failure to containerize universal waste as required by 22 CCR §66273.33(b)(1).

Requirements:

As stated in California regulation 22 CCR §66273.33(b)(1), universal waste lamps shall be contained in containers or packages that remain closed.

Findings:

In the Hazardous Waste Storage Area there was one open box of spent fluorescent tubes

4. Failure to label universal waste as required by 22 CCR §66273.34(c).

Requirements:

As stated in California regulation 22 CCR §66273.34(c), lamps, or a container or package in which the lamps are contained, shall be labeled or marked clearly with the following phrase: "Universal Waste-Lamp(s)."

Findings:

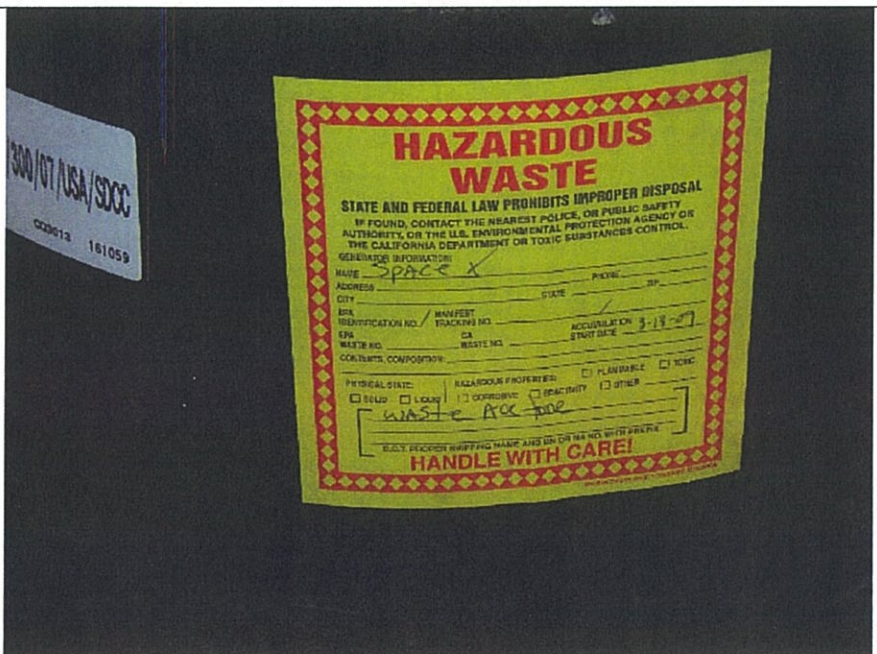
In the Hazardous Waste Storage Area there were two boxes of spent fluorescent tubes that were not labeled.

Photo Log

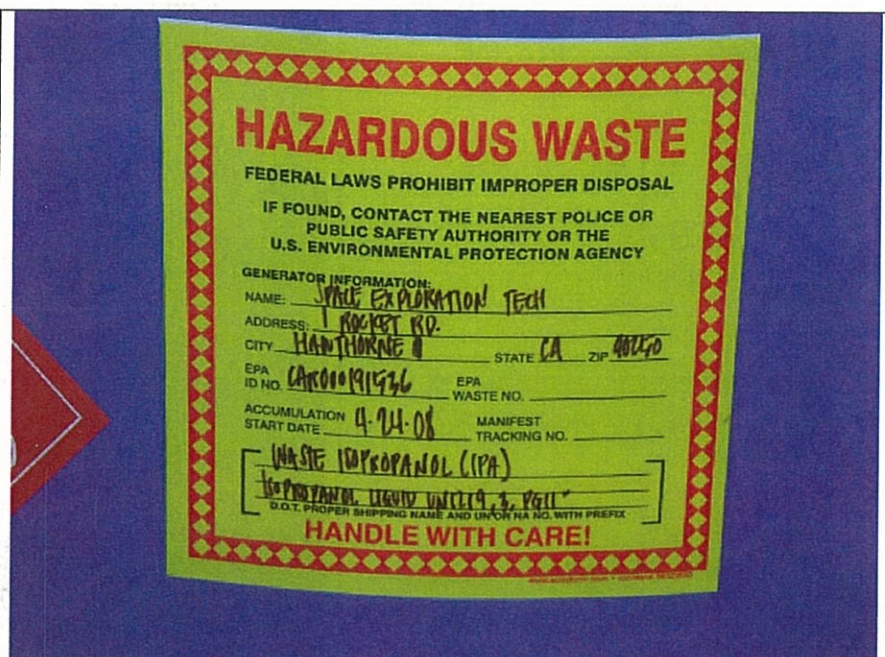
(Photo Log includes a portion of the inspection photos)

Area 1 – Hazardous Waste Storage Area

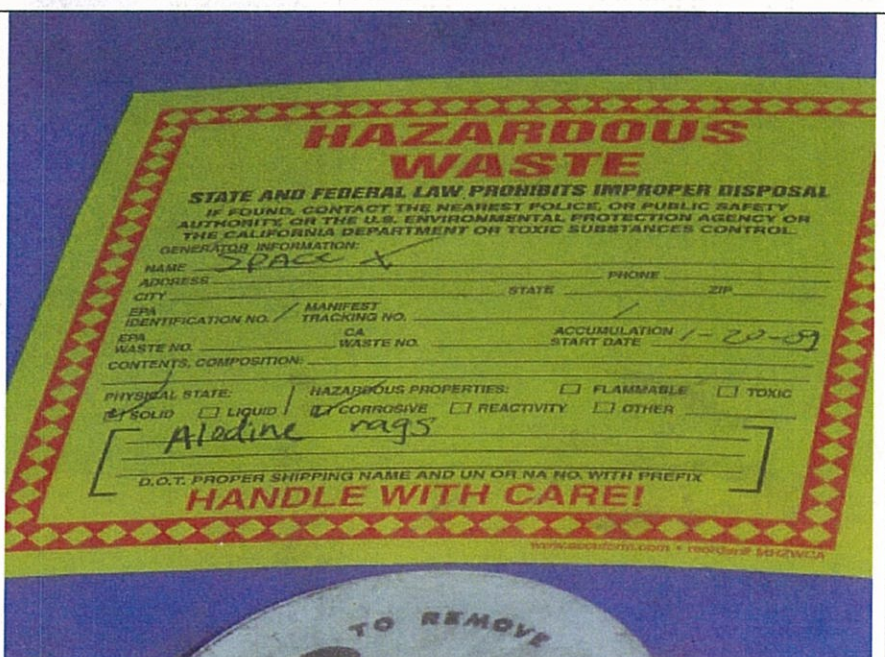
Area: Hazardous Waste Storage Area	
Location: Hazardous Waste Storage Area	
Photo: 1-A	Date: 7/13/09
Potential Violations: Storage of hazardous waste for longer than 90 days.	
Description: Label of waste acetone container (D001) with ASD of 3/13/09.	



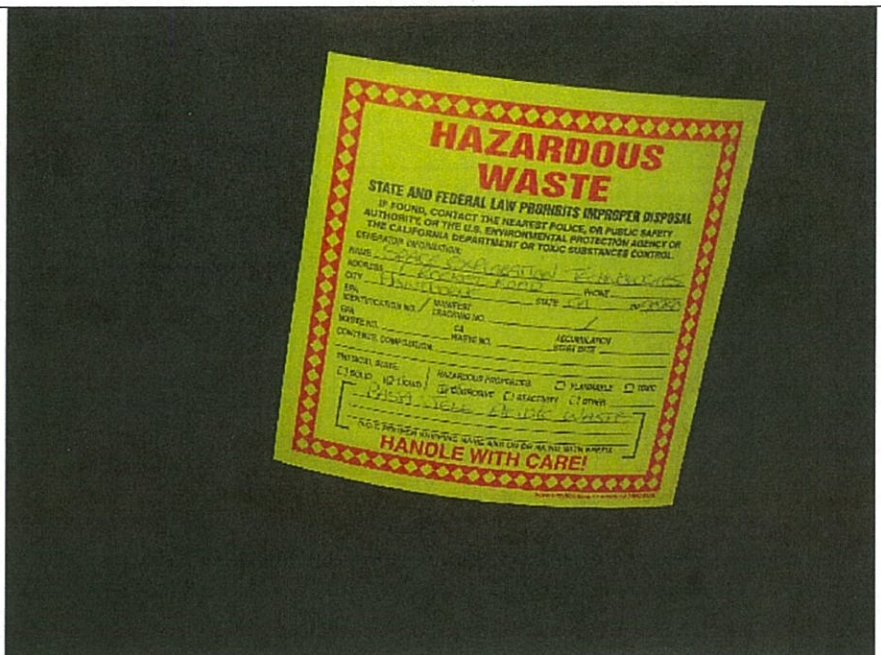
Area: Hazardous Waste Storage Area	
Location: Hazardous Waste Storage Area	
Photo: 1-B	Date: 7/13/09
Potential Violations: Storage of hazardous waste for longer than 90 days.	
Description: Label of waste isopropyl alcohol container (D001) with ASD of 4/24/08.	



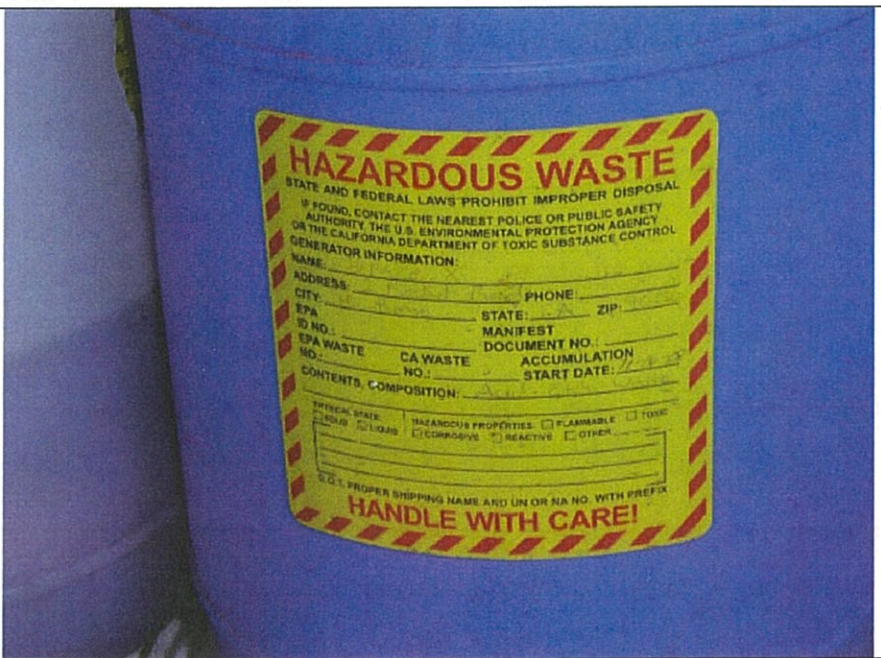
Area: Hazardous Waste Storage Area	
Location: Hazardous Waste Storage Area	
Photo: 1-C	Date: 7/13/09
Potential Violations: Storage of hazardous waste for longer than 90 days.	
Description: Label of waste alodine rags container (D007) with ASD of 1/20/09.	




Area: Hazardous Waste Storage Area	
Location: Hazardous Waste Storage Area	
Photo: 1-D	Date: 7/13/09
Potential Violations: Incomplete hazardous waste label	
Description: Label of Pasa Jell acidic waste container (D002, D007)	




Area: Hazardous Waste Storage Area	
Location: Hazardous Waste Storage Area	
Photo: 1-E	Date: 7/13/09
Potential Violations: Storage of hazardous waste for longer than 90 days.	
Description: Label of acidic etch waste container (D002) with ASD of 11/16/08.	



Area: Hazardous Waste Storage Area	
Location: Hazardous Waste Storage Area	
Photo: 1-F	Date: 7/13/09
Potential Violations: Lack of aisle space	
Description:	

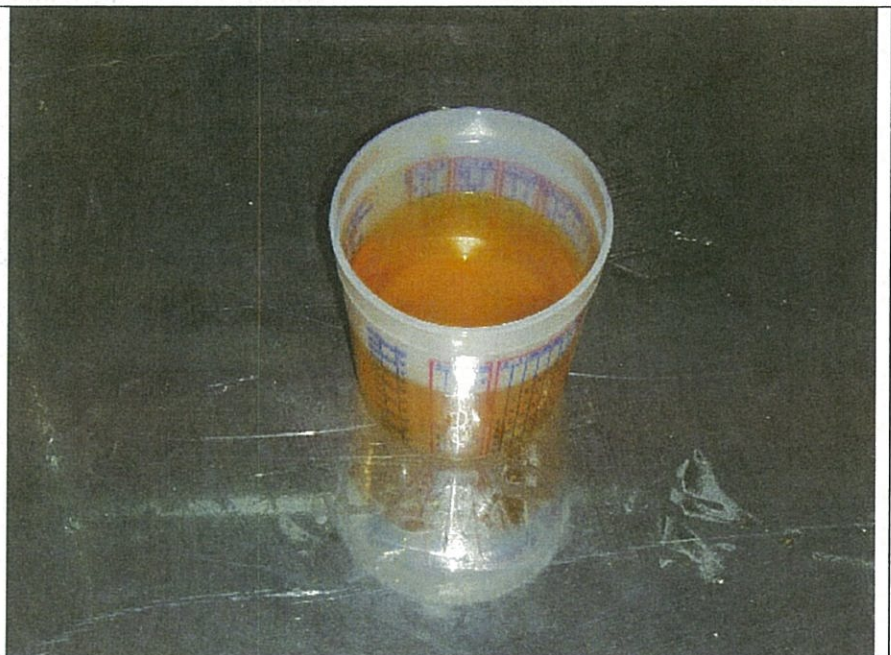


Area: Hazardous Waste Storage Area	
Location: Hazardous Waste Storage Area	
Photo: 1-G	Date: 7/13/09
Potential Violations: Lack of aisle space	
Description:	




Area 2 – None

Area 3 – PICA Lab

Area: PICA Lab Location: Inside lab		
Photo: 3-A	Date: 7/13/09	
Potential Violations: Open and unlabeled container of hazardous waste.		
Description: Container of waste resin (D001)		

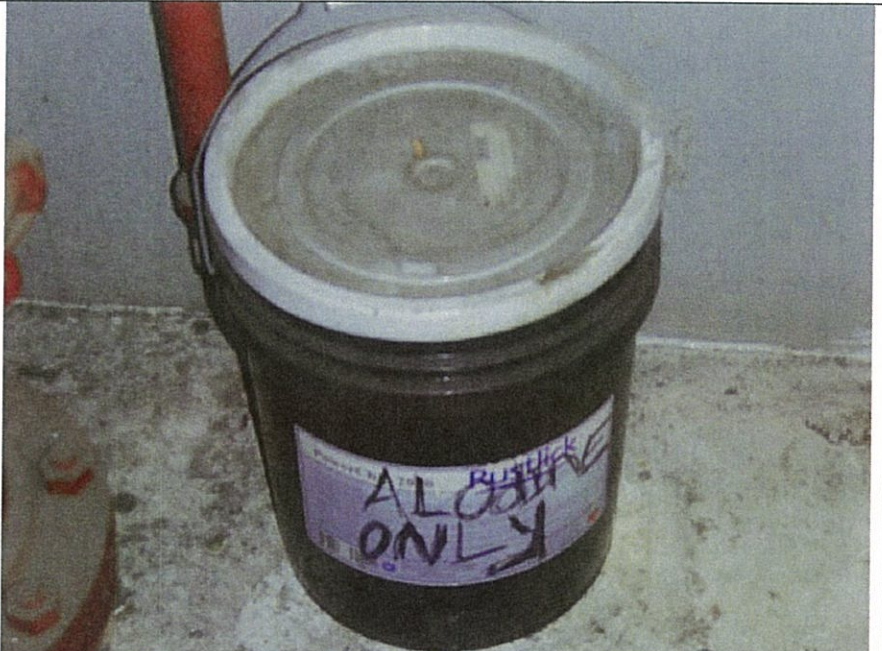
Area 4 – Avionics

Area: Avionics Location: Avionics area		
Photo: 4-A	Date: 7/13/09	
Potential Violations: Improperly labeled containers of hazardous waste		
Description:		


Area 5 – None

Area 6 – None

Area 7 – Spin-form Area

Area: Spin-form Area Location: Spin-form Area		
Photo: 7-A	Date: 7/13/09	
Potential Violations: Need waste determination.		
Description:		

Area 8 – Machine Shop

Area: Machine Shop Location: Lathe and Mill Area		
Photo: 8-A	Date: 7/13/09	
Potential Violations: Need waste determination.		
Description:		



Los Angeles County Fire Dept • Health Hazardous Materials Division
Certified Unified Program Agency • Participating Agency



REFER REPLY TO:
Southwest (Lomita) District Office
24330 Narbonne Avenue
Lomita, CA 90717
(310) 534-6270

INSPECTION REPORT

BUSINESS: SPACE EXPLORATION TECHNOLOGIES	OWNER: ELON MUSK	DATE: 5/5/2010
ADDRESS: 1 ROCKET RD HAWTHORNE CA 90250		FA TBD

The following items, if applicable, have been inspected. This document constitutes a Summary of Violations and Notice to Comply if the violation (V) column is checked. Reference: Titles 19 and 22 of the California Code of Regulations (CCR), Chapters 6.5, 6.67, and 6.95 of the Health and Safety Code (HSC), and Titles 11 and 12 of the Los Angeles County Code (Co Ord)

HAZARDOUS WASTE GENERATOR			HAZARDOUS WASTE GENERATOR		
V	SUBJECT	SECTION	V	SUBJECT	SECTION
1	Hazardous waste determination	CCR 66262.11	24	Manifest copies retained for 3 years	CCR 66262.40(a)
2	Proper disposal of hazardous waste	HSC 25189.5 (a)	25	Consolidated manifest requirements	HSC 25160.2
3	Maintain/operate to prevent release/fire	CCR 66265.31	26	Hazardous waste transported by registered hauler	HSC 25163(a)
4	Hazardous waste labeling	CCR 66262.34(f)	27	LDR documents retained onsite	CCR 66268.7(a)(6)
5	Hazardous waste accumulation time	CCR 66262.34(a-d)	28	Hazardous waste analysis retained for 3 years	CCR 66262.40(c)
6	Hazardous materials storage and labeling	CCR 66261.2(f)	29	Personnel training	CCR 66265.16
7	Satellite accumulation	CCR 66262.34(e)	30	Contingency plan	CCR 66265.51
8	Containers leaking or not in good condition	CCR 66265.171	31	Emergency preparedness/prevention	CCR 66265.30-.37
9	Hazardous waste containers closed	CCR 66265.173(a)	32	Source Reduction requirements for LQGs	CCR 67100.3
10	Separation of incompatibles	CCR 66265.177	33	Biennial Report requirements	CCR 66262.40-.41
11	Retrograde/accumulated speculatively	CCR 66262.10	34	Excluded recyclable material management	HSC 25143.2/9
12	Empty containers	CCR 66261.7	35	Recyclable Material Report	HSC 25143.10
13	Used oil management	CHSC 25250.4	36	Site assessment requirements	HSC 25187(a)(1)
14	Used oil filter management	CCR 66266.130	37	Closure requirements	CCR 66265.111/114
15	Used battery management	CCR 66266.81	38	Reckless management of hazardous waste	HSC 25189.6
16	Contaminated textile management	HSC 25144.6	39	Other violation(s)	
17	Container inspection - weekly	CCR 66265.174	HAZARDOUS MATERIALS HANDLER		
18	Tank inspection - daily	CCR 66265.195	50	Contingency plan/inventory submitted	HSC 25503.5
19	Tank operating requirements	CCR 66265.194	51	Plan and inventory updated & accurate	HSC 25505
20	EPA ID number[submit DTSC form 1358]	CCR 66262.12	52	Regulated substance registration	HSC 25533(a)
21	Hazardous waste transported with manifest	CCR 66262.20	ABOVEGROUND PETROLEUM STORAGE TANK		
22	Hazardous waste manifest complete	CCR 66262.23(a)	60	SPCC Plan Referral to RWQCB (213) 576-6600	HSC 25270.3
23	Manifest copies to DTSC	CCR 66262.23(a)(4)	70	PERMIT REQUIRED - Submit UP Forms	Co Ord 12.50.075

☒ NO SIGNIFICANT VIOLATIONS OBSERVED ON DATE OF INSPECTION.

☐ NOTICE TO COMPLY: THE VIOLATION(S) CITED MUST BE CORRECTED BY _____.

☐ RETURN CERTIFICATION OF COMPLIANCE FOUND ON BACK OF THIS NOTICE.

Attention: The items checked are in violation. A reinspection may occur at any time to verify compliance. Non-compliance could result in reinspection fees, permit revocation, and/or administrative/civil/criminal penalties. Any time granted for correction of the violation(s) does not preclude any enforcement action by this Department or other agencies.

It is improper and illegal for any County officer, employee or inspector to solicit bribes, gifts or gratuities in connection with performing their official duties. Improper solicitations include requests for anything of value such as cash, discounts, free services, paid travel or entertainment, or tangible items such as food or beverages. Any attempt by a County employee to solicit bribes, gifts or gratuities for any reason should be reported immediately to either the County manager responsible for supervising the employee or the Fraud Hotline at (800) 544-6861 or www.lacountyfraud.org.
YOU MAY REMAIN ANONYMOUS.

NO SIGNIFICANT VIOLATIONS OBSERVED.

- NEW PERMITTED FACILITY

- OBTAINED COPIES OF CONTINGENCY PLAN.

- FACILITY IS CLEAN AND WELL RUN. KEEP UP THE GOOD JOB!

Inspected By: RUBEN GARCIA	Consent Given By: + Bill Woolley	Authorized Representative's Signature: + [Signature]
-------------------------------	-------------------------------------	---



2009 HAZARDOUS WASTE SUMMARY

MANIFEST TOTAL	53		
QTY/LBS TOTAL	6513		
QTY/GALS TOTAL	11640		
QTY/TONS TOTAL	51.7953		
RECYCLED TOTAL	(lines) 46	(manifests) 33	

MONTHLY TOTALS IN POUNDS of RCRA HAZARDOUS WASTE

MONTH	LBS	MONTH	LBS
JANUARY	1137.4	JULY	1194.1
FEBRUARY	0.0	AUGUST	458.7
MARCH	0.0	SEPTEMBER	0.0
APRIL	2094.0	OCTOBER	620.4
MAY	0.0	NOVEMBER	458.7
JUNE	1583.8	DECEMBER	754.9



**2008 HAZARDOUS WASTE
SUMMARY**

MANIFEST TOTAL		24	
QTY/LBS TOTAL		5700	
QTY/GALS TOTAL		4945	
QTY/TONS TOTAL		23.47065	
RECYCLED TOTAL	(lines)	16	(manifests) 9

MONTHLY TOTALS IN POUNDS of RCRA HAZARDOUS WASTE

MONTH	LBS	MONTH	LBS
JANUARY	X	JULY	170.0
FEBRUARY	X	AUGUST	1650.4
MARCH	X	SEPTEMBER	200.0
APRIL	X	OCTOBER	2369.8
MAY	0.0	NOVEMBER	538.7
JUNE	2057.1	DECEMBER	0.0

November 24, 2009

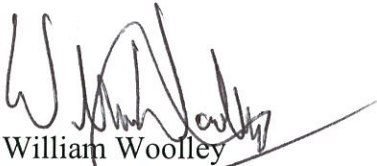
Mr. James Polek
RCRA Enforcement Office (WST-3)
U.S. EPA, Region 9
San Francisco, CA. 94105

Dear Mr. Polek:


Thank you for this opportunity to demonstrate our commitment to having a fully compliant hazardous waste management program. The deficiencies in our program that were noted in the closing briefing during your visit and your subsequent report that we received on October 29, 2009, have shown us where we were lacking. Since your visit, we have been working diligently to bring our program up to full compliance, with many of the noted deficiencies being mitigated within the week after your visit. We have corrected the remaining areas of deficiency that were noted in the Notice of Violation and we are now fully compliant.

We look forward to future visits and the opportunity to work together to ensure a workplace safe for our employees and the environment. Thank you again.

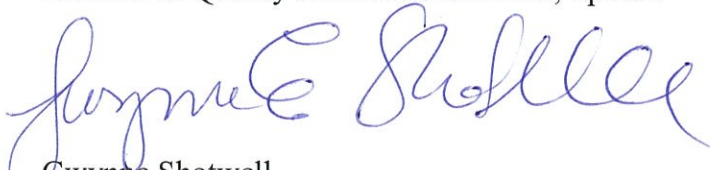
Sincerely,

A handwritten signature in black ink, appearing to read "William Woolley".

William Woolley
EHS Manager, SpaceX

A handwritten signature in black ink, appearing to read "Grant Ingram".

Grant Ingram
Director of Quality Assurance and EHS, SpaceX

A handwritten signature in blue ink, appearing to read "Gwynne Shotwell".

Gwynne Shotwell
President, SpaceX



VIOLATION MITIGATION DOCUMENTATION

November 24, 2009

This document will address the five violations listed in the Notice of Violation document that was received by our facility on October 29, 2009, which was the result of the July 13, 2009 visit. These explanations are accompanied by the relevant requested documentation.

- 1. Provide photographs documenting that the containers are properly labeled, as required by 22CCR§66262.34(f), in the following satellite accumulation areas: PICA Laboratory and Avionics Area. Certify that all hazardous waste containers at your facility are properly labeled.**

We have reviewed our usage of the red flip-top lid cans and found that many were being used incorrectly. We have now identified the specific waste streams that are used by different departments and have labeled the waste containers appropriately. The importance of the accumulation start dates were stressed to the affected employees. Please examine the accompanying photographs, numbered 1-11, to see that we are now in compliance with the regulations that all waste containers are labeled and closed. The majority of the red, and some yellow, flip-lid cans are used only to contain soiled rags that are picked up and laundered by Aramark. From a suggestion made during the July visit, all containers that hold the soiled rags are now labeled, "Soiled Rags for Laundry" as they are not considered a hazardous waste. In the Avionics Department, it was noted that there were red cans labeled FOD and that they were not labeled correctly. FOD, which stands for Foreign Object Debris, which leads to Foreign Object Damage, is an aerospace term. Basically, the red FOD cans in the Avionics department are just trash cans that do not contain hazardous waste. There is an accompanying sheet with more of a FOD explanation.

- 2. Provide a hazardous waste determination of the "Alodine only" container in the Spin-form Area and the cutting oil and unknown material in the Machine Shop.**

The five gallon pail that said "Alodine only" on it was removed to the hazmat area the same day as the July visit. The material was determined to be waste Alodine and was transported from our facility as noted on manifest #006078583. A copy of the manifest accompanies this document and is numbered 1. The cutting oil from the machine shop was removed to the hazmat area the same day as the July visit. The photographic proof of the revised closed, labeled container system was sent to you, via e-mail, on July 21, 2009. The record of the proper disposal of the cutting oil is found on line 2, of manifest #000765399. . A copy of the manifest accompanies this document and is numbered 2. The unknown material in the machine shop was identified as new product, a Vactra Oil, which was being used in the maintenance of the machine it was next to. The employee who had placed the oil in the un-marked container and



had left it by the machine was talked to and the material was moved right away to the proper storage location and placed back in the correct, labeled drum.

- 3. Provide copies of the land disposal restriction notifications for hazardous waste shipped from your current facility.**

Copies of all LDR's for EPA # CAR000191536, the waste number for 1 Rocket Road, Hawthorne, CA. accompany this document. Another copy is attached to the matching manifests so now our records are up to date.

- 4. Submit a copy of the revised portion of SpaceX's contingency plan that includes arrangements with emergency responders and includes descriptions and locations of emergency equipment throughout the facility.**

Our revised contingency plan accompanies this document. Additional documents accompany the contingency plan. They are as follows:

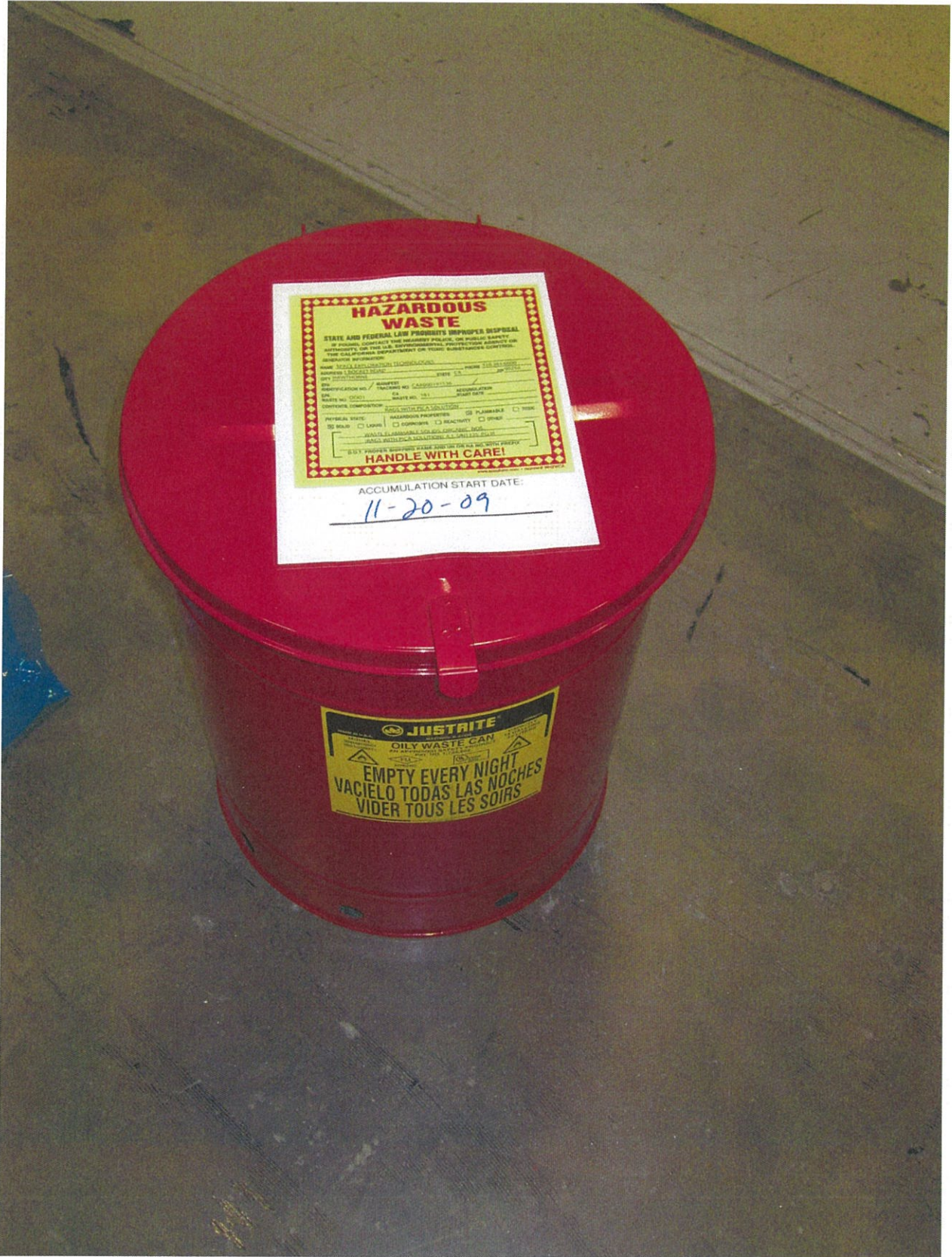
Emergency Response Team explanation

Photograph of one of the two large signs from our hazardous waste contractor indicating their 24hr emergency number.

An explanatory document for the five facility maps, and the five facility maps, that indicate the locations of emergency response equipment throughout our facility.

- 5. Submit a copy of the training plan for personnel conducting hazardous waste management activities, as required by 22CCR§66265.16.**

Documents indicating the training requirements for Hazardous Materials Technicians, the names of the Hazardous Materials Technicians and their training certifications, and copies of the training certifications, prove compliance with the regulation.



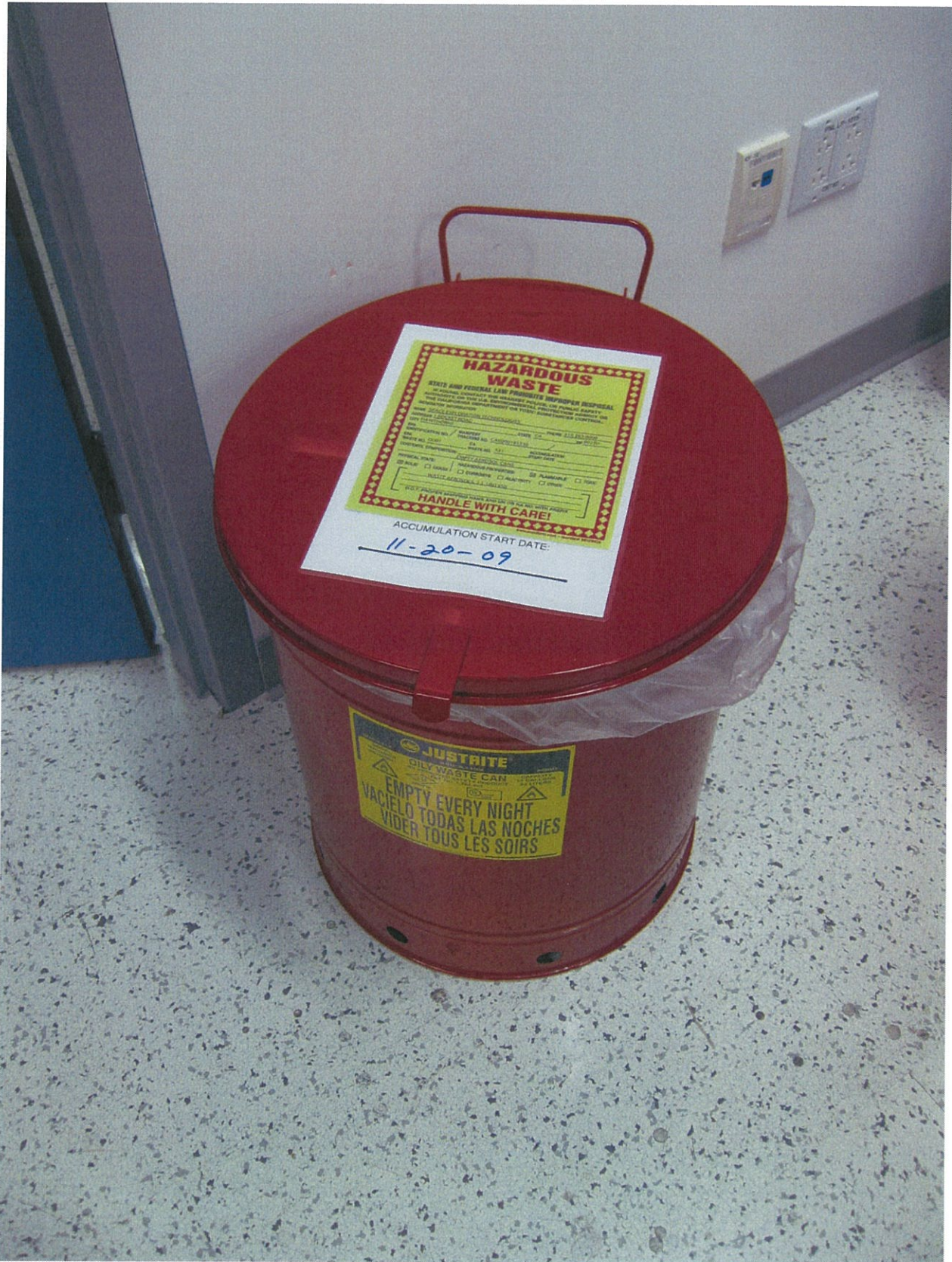
1

PICA LAB - Labeled red can with identified waste stream.



2

PICA LAB – Close-up of label. Start date changed after every pick-up.



3

AVIONICS CLEAN ROOM – Labeled red can with identified waste stream.



4

AVIONICS CLEAN ROOM – Close-up of label. Start date changed after every pick-up.



5

AVIONICS CLEANROOM – FOD can. Aerospace industry, non-hazardous trash can.



6

THROUGHOUT FACILITY - The red, and yellow, cans throughout the facility are used only for soiled rags that are laundered by Aramark. They do not contain hazardous waste. The wording on the cans, and the accumulation box in the hazmat area, came from a suggestion by the inspection team during the July 2009 visit.



7

STRUCTURES TEST AREA – Soiled rag can and a labeled, used absorbents can.



8

PRODUCTION AREA – Satellite accumulation point for hazardous waste rags.

**HAZARDOUS
WASTE**

STATE AND FEDERAL LAW PROHIBITS IMPROPER DISPOSAL
IF FOUND, CONTACT THE NEAREST POLICE, OR PUBLIC SAFETY
AUTHORITY, OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY OR
THE CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL.

GENERATOR INFORMATION:

NAME SPACE EXPLORATION TECHNOLOGIES
ADDRESS 1 ROCKET ROAD PHONE 310-363-6666
CITY HAWTHORNE STATE CA ZIP 910250

EPA IDENTIFICATION NO. / MANIFEST TRACKING NO. CA000191536/
EPA WASTE NO. D002 CA WASTE NO. 792 ACCUMULATION START DATE 09.18.09
CONTENTS, COMPOSITION: WASTE ALDINE RAGS

PHYSICAL STATE: ☒ SOLID ☐ LIQUID HAZARDOUS PROPERTIES: ☐ FLAMMABLE ☐ TOXIC
☒ CORROSIVE ☐ REACTIVITY ☐ OTHER

WASTE CORROSIVE SOLID, ACIDIC
INORGANIC, NOS, 8, UN3264, III

D.O.T. PROPER SHIPPING NAME AND UN OR NA NO. WITH PREFIX

HANDLE WITH CARE!

www.ecuform.com • reorder# MHZWCA

9

PRODUCTION AREA – Close-up of label on drum at satellite accumulation point.



10

HAZMAT AREA – Labeled waste fluorescent lamp box.



11

HAZMAT AREA – Closed, Labeled, universal waste box, lamps.

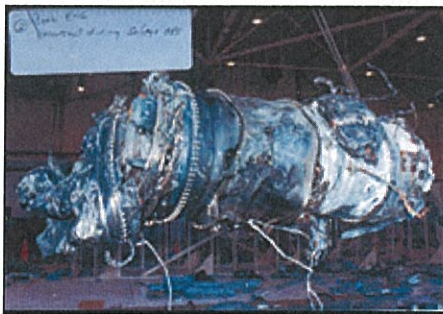
FOD Defined



Foreign Object Debris (FOD) is a substance, debris or article alien to the vehicle or system which would potentially cause damage.

Foreign Object Damage is any damage attributed to a foreign object that can be expressed in physical or economic terms that may or may not degrade the product's required safety and/or performance characteristics. Typically, FOD is an aviation term used to describe debris on or around an aircraft or damage done to an aircraft.

Source: Wikipedia



An engine from a US Navy A-6E that crashed shortly after takeoff

FOD has been part of accidents and unscheduled maintenance reports since the earliest days of flight. Propeller nicks, tire damage, and fabric tears go way back. But the problem of foreign objects really came into focus with the introduction of the jet engine.

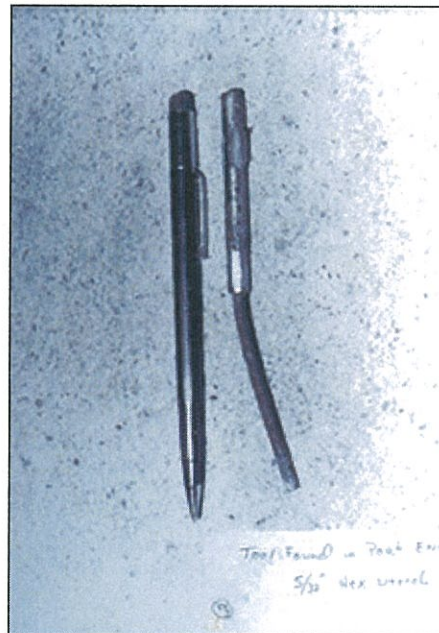
FOD includes loose hardware, tools, parts, pavement fragments, catering supplies, building materials, rocks, sand, pieces of luggage, pens, coins, badges, hats, soda cans, paper clips, rags, trash, paperwork and even wildlife. Anything that can find its way into an aircraft engine or flight control mechanisms is a recipe for foreign object damage.

And, this damage can result in anything from minor repairs to catastrophic events. FOD can be found anywhere in the aviation environment--from the manufacturing plant to airport terminal gates, cargo aprons, taxiways, runways, and run-up pads.

The National Aerospace FOD Prevention, Inc. estimates the cost of FOD to the global aerospace industry at \$4 billion annually. These dollars are spent largely repairing aircraft engine damage caused by the ingestion of foreign objects from runways.

Perhaps most importantly, FOD is preventable.

For more information on FOD, check out these [resources](#).



The hex wrench, found inside the engine, that crashed it

Source for images: Naval Safety Center

RECEIVED

OCT 13 2007

CAR000191536

2. Page 1 of 1

3. Emergency Response Phone

800-618-8830

4. Manifest Tracking Number

006078583 JJK

Generator's Name and Mailing Address

Space Exploration Tech.

1 Rocket Road
Hawthorne, CA 90250

Generator's Site Address (if different than mailing address)

1 Rocket Rd.
Hawthorne, CA 90250

Generator's Phone: 310 363-6000

6. Transporter 1 Company Name

SOS Ecology Management

U.S. EPA ID Number

CAR000111583

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

Siemens Water Technologies Corp.
5375 S. Boyle Ave.
Los Angeles, CA 90058

U.S. EPA ID Number

Facility's Phone: 323-277-1500

CAD0097030993

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
		No.	Type					
X	1. Waste Corrosive Liquid, Acidic, Inorganic, nos, (Sulfuric Acid, Chromic Acid), 8, UN3264, PGII	001	DF	005	G	D002	D007	141
X	2. Hazardous waste, solid, n.o.s., (Rags with Alodine/Chromium), 9, NA3077, PGIII	001	DF	050	P	D007	181	
	3. NON RCRA HAZARDOUS WASTE, SOLID (Filters)	001	DF	300	P		352	
	4.							

14. Special Handling Instructions and Additional Information

1) P179098 2) AP169389 3) 35072847B

SOS#7616

ALL BILLING SOS ECOLOGY MANAGEMENT. WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT.

RS48424 D138945

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.

I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offor's Printed/Typed Name

Mark Drop

Signature

Month Day Year

10 07 07

16. International Shipments

☐ Import to U.S.☐ Export from U.S.

Port of entry/exit:

Date leaving U.S.:

Transporter signature (for exports only):

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name

ABELARDO CABELLO

Signature

ABELARDO CABELLO

Month Day Year

10 07 09

Transporter 2 Printed/Typed Name

Signature

Month Day Year

18. Discrepancy

18a. Discrepancy Indication Space

☐ Quantity☐ Type☐ Residue☐ Partial Rejection☐ Full Rejection

Manifest Reference Number:

U.S. EPA ID Number

18b. Alternate Facility (or Generator)

Facility's Phone:

18c. Signature of Alternate Facility (or Generator)

Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1. HULL	2. HULL	3. HULL	4.
---------	---------	---------	----

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name

Signature

Month Day Year

10 07 09

GENERATOR

TRANSPORTER INT'L

DESIGNATED FACILITY

2

(Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

HAZARDOUS WASTE MANIFEST		1. Generator ID Number CAR000191536	2. Page 1 of 1	3. Emergency Response Phone 800-618-8830	4. Manifest Tracking Number 000765399 JJK		
Generator's Name and Mailing Address Space Exploration Tech. 1 Rocket Road Hawthorne, CA 90250 Generator's Phone: 310 363-6000			Generator's Site Address (if different than mailing address) 1 Rocket Rd. Hawthorne, CA 90250				
6. Transporter 1 Company Name SOS Ecology Management			U.S. EPA ID Number CAR000111583				
7. Transporter 2 Company Name BY: _____			U.S. EPA ID Number				
8. Designated Facility Name and Site Address DeMenno/Kerdoon 2000 N. Alameda Street Compton, CA 90222 Facility's Phone: 310-537-7100			U.S. EPA ID Number CAT080013352				
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
		1. NON-RCRA HAZARDOUS WASTE LIQUID (WASTE WATER/COOLANT)	001	TR	275 G		223
		2. NON-RCRA HAZARDOUS WASTE LIQUID (WASTE OIL) THIS WASTE STREAM HAS BEEN QUALIFIED FOR RECYCLING/TREATMENT AT THE DeMENNO/KERDOON FACILITY IN COMPTON, CALIFORNIA. THIS FACILITY HAS THE NECESSARY PERMITS TO RECEIVE YOUR WASTE STREAM AS QUALIFIED. OUR EPA NUMBER IS CAT080013352	001	DM	SS	G	221
		3.					
		4.					
14. Special Handling Instructions and Additional Information 1) 314303 2) SOS#7551 ALL BILLING SOS ECOLOGY MANAGEMENT. WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT.							
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's/Offero's Printed/Typed Name Mark Drop		Signature [Signature]		Month Day Year 08 28 09			
INTL	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: Date leaving U.S.:				
	Transporter signature (for exports only):						
TRANSPORTER	17. Transporter Acknowledgment of Receipt of Materials						
	Transporter 1 Printed/Typed Name ABENNO	Signature [Signature]	Month Day Year 08 28 09				
	Transporter 2 Printed/Typed Name	Signature [Signature]	Month Day Year				
DESIGNATED FACILITY	18. Discrepancy						
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
	Manifest Reference Number:						
	18b. Alternate Facility (or Generator) U.S. EPA ID Number						
	Facility's Phone:						
	18c. Signature of Alternate Facility (or Generator)					Month Day Year	
	19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
	1. H039	2. H039	3.	4.			
	20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a						
	Printed/Typed Name Armando Traveiro		Signature [Signature]		Month Day Year 08 31 09		

**Unified Program (UP) Form
CONSOLIDATED CONTINGENCY PLAN**

SECTION I: BUSINESS PLAN AND CONTINGENCY PLAN

I. FACILITY IDENTIFICATION			
BUSINESS NAME SPACE EXPLORATION TECHNOLOGIES		3	FACILITY ID # 1
SITE ADDRESS 1 ROCKET ROAD		103	CITY HAWTHORNE
		104	ZIP CODE 90250
II. EMERGENCY CONTACTS			
PRIMARY		SECONDARY	
NAME WILLIAM WOOLLEY	123	NAME GRANT INGRAM	128
TITLE EHS MANAGER	124	TITLE DIRECTOR OF QUALITY ASSURANCE AND EHS	129
BUSINESS PHONE 310.363.6645	125	BUSINESS PHONE 310.363.6256	130
24-HOUR PHONE 310.956.0673	126	24-HOUR PHONE 562.746.6517	131
PAGER #	127	PAGER #	132
III. EMERGENCY RESPONSE PLANS AND PROCEDURES			
A. Notifications			
<p>Your business is required by State Law to provide an immediate verbal report of any release or threatened release of a hazardous material to local fire emergency response personnel, this Unified Program Agency (CUPA or PA), and the Office of Emergency Services. If you have a release or threatened release of hazardous materials, immediately call:</p> <p style="text-align: center;">FIRE/PARAMEDICS/POLICE/SHERIFF PHONE: 911</p> <p>AFTER the local emergency response personnel are notified, you shall then notify this Unified Program Agency and the Office of Emergency Services.</p> <p>Local Unified Program Agency: (323) 890-4317 State Office of Emergency Service: (800) 852-7550 or (916) 262-1621 National Response Center: (800) 424-8802</p>			
Information to be provided during Notification:			
<ul style="list-style-type: none"> ❖ Your Name and the Telephone Number from where you are calling. ❖ Exact address of the release or threatened release. ❖ Date, time, cause, and type of incident (e.g. fire, air release, spill etc.) ❖ Material and quantity of the release, to the extent known. ❖ Current condition of the facility. ❖ Extent of injuries, if any. ❖ Possible hazards to public health and/ or the environment outside of the facility. 			
B. Emergency Medical Facility			
List the local emergency medical facility that will be used by your business in the event of an accident or injury caused by a release or threatened release of hazardous material			
HOSPITAL/CLINIC: U.S. HEALTHWORKS		PHONE NO: 310-640-9911	
ADDRESS: 390 N. SEPULVEDA BLVD.STE 1000			
CITY: EL SEGUNDO		ZIP CODE: 90245	

OFFICIAL USE ONLY			DATE RECEIVED		REVIEWED BY	
DIV	BN	STA	OTHER	DISTRICT	CUPA	PA

**Unified Program (UP) Form
CONSOLIDATED CONTINGENCY PLAN**

SECTION I: BUSINESS PLAN AND CONTINGENCY PLAN

C. Private Emergency Response

DOES YOUR BUSINESS HAVE A PRIVATE ON-SITE EMERGENCY RESPONSE TEAM? ☒ Yes ☐ No
If yes, provide an attachment that describes what policies and procedures your business will follow to notify your on-site emergency response team in the event of a release or threatened release of hazardous materials.

CLEANUP/DISPOSAL CONTRACTOR

List the contractor that will provide cleanup services in the event of a release.

NAME OF CONTRACTOR:
SOS ECOLOGY MANAGEMENT

PHONE NO:
310-618-8830

ADDRESS:
201 E. GARDENA BLVD

CITY:
GARDENA

ZIP CODE:
90248

D. Arrangements With Emergency Responders

If you have made special (i.e. contractual) arrangements with any police department, fire department, hospital, contractor, or State or local emergency response team to coordinate emergency services, describe those arrangements on the lines below:

WE HAVE AN ARRANGEMENT WITH SOS ECOLOGY MANAGEMENT TO RESPOND TO A LARGE SPILL OR CHEMICAL RELEASE. WE HAVE TWO LARGE SIGNS POSTED AT OUR FACILITY THAT SHOW THE 24hr RESPONSE PHONE NUMBER. THE 24hr EMERGENCY RESPONSE PHONE NUMBER IS 800-618-8830. SOS HAS INDICATED THAT THEY HAVE THE ABILITY TO RESPOND WITHIN TWENTY MINUTES TO AN EMERGENCY CALL. OUR CONTACT AT SOS ECOLOGY MANAGEMENT IS VIRGINIA ALEJANDREZ @ 310-698-1151

E. Evacuation Plan

1. The following alarm signal(s) will be used to begin evacuation of the facility (*check all which apply*):

☒ Verbal ☐ Telephone (*including cellular*) ☒ Alarm System ☒ Public Address System ☐ Intercom
☐ Pagers ☒ Portable Radio ☐ Other (*specify*):

2. ☒ Evacuation map is prominently displayed throughout the facility.

3. ☒ Individual(s) responsible for coordinating evacuation including spreading the alarm and confirming the business has been evacuated:

ROBERT ELLINGTON, SECURITY MANAGER
WILLIAM WOOLLEY, EHS MANAGER
JOE MULLIN, FACILITIES MANAGER

F. Earthquake Vulnerability

Identify areas of the facility where releases could occur or would require immediate inspection or isolation because of the vulnerability to earthquake related ground motion.

☒ Hazardous Waste/ Hazardous Materials Storage Areas ☐ Production Floor ☒ Process Lines
☐ Bench/ Lab ☐ Waste Treatment ☐ Other:

Identify mechanical systems where releases could occur or would require immediate inspection or isolation because of the vulnerability to earthquake related ground motion.

☐ Utilities ☒ Sprinkler Systems ☐ Cabinets ☐ Shelves
☐ Racks ☐ Pressure Vessels ☐ Gas Cylinders ☒ Tanks
☒ Process Piping ☐ Shutoff Valves ☐ Other:

**Unified Program (UP) Form
CONSOLIDATED CONTINGENCY PLAN**

SECTION I: BUSINESS PLAN AND CONTINGENCY PLAN

G.	Emergency Procedures
Briefly describe your business standard operating procedures in the event of a release or threatened release of hazardous materials:	
1.	PREVENTION (prevent the hazard) - Describe the kinds of hazards associated with the hazardous materials present at your facility. What actions would your business take to prevent these hazards from occurring? You may include a discussion of safety and storage procedures. The primary hazardous materials onsite are compressed gasses, the vast majority of which are non-flammable. The primary hazard of compressed gasses, in a leak scenario, would be atmospheric in that they could displace Oxygen. Any enclosed workspaces that utilize compressed gasses, are monitored for Oxygen content. All compressed gasses, that are not in use, are stored in marked, designated areas with proper storage distances observed. All flammable liquids are stored in proper, grounded containers and are stored in areas with secondary containment. All hazardous waste is stored in a dedicated area with secondary containment and spill control supplies.
2.	MITIGATION (reduce the hazard) - Describe what is done to lessen the harm or the damage to person(s), property, or the environment, and prevent what has occurred from getting worse or spreading. What is your immediate response to a leak, spill, fire, explosion, or airborne release at your business? The primary storage area for the on-site hazardous materials is separate and distant from normal work areas. In the event of an emergency, the natural distance of employees from the potential hazards lessens the possible injuries. The immediate response to an emergency is to determine the location, type and severity of the emergency and call 911 if needed. In the event of a leak or spill, we will isolate the spill, determine the cause and severity, and ensure employee safety. Our hazardous waste contractor will be called to mitigate a large spill. In the event of a fire, fire extinguishers and good judgment can be utilized on a small incident for mitigation. For an airborne release, distance and ventilation will be utilized to mitigate the hazard.
3.	ABATEMENT (remove the hazard) - Describe what you would do to stop and remove the hazard. How do you handle the complete process of stopping a release, cleaning up, and disposing of released materials at your facility? In the event of a small, liquid spill, spill containment products, proper PPE, and training will control the problem. Saturated absorbents will be contained properly and handled by our hazardous waste disposal contractor. A large spill will be handled by our hazardous waste disposal contractor. All spill/release incidents will be fully documented and kept in hardcopy form as well as in an online archive. Since we have designed and installed the equipment that could be involved in an incident, we have designed in safeguards to lessen the probability of such an incident. We also have intimate knowledge of our systems in our facility to know what to shut off, where, in the event of a release or spill. All mechanical systems will be completely inspected and tested prior to being placed back online after an incident.

Unified Program (UP) Form CONSOLIDATED CONTINGENCY PLAN

SECTION I: BUSINESS PLAN AND CONTINGENCY PLAN

IV. Emergency Equipment

22 CCR, Section 66265.52(e) [as referenced by Section 66262.34(a)(3)] requires that emergency equipment at the facility be listed. Completion of the following Emergency Equipment Inventory Table meets this requirement.

EMERGENCY EQUIPMENT INVENTORY TABLE

1. Equipment Category	2. Equipment Type	3. Location *	4. Description**
Personal Protective, Equipment, Safety Equipment, and First Aid Equipment	<input checked="" type="checkbox"/> Cartridge Respirators	MAP 5, 2-8	½ MASK AND FULL-FACE NEGATIVE PRESSURE
	<input checked="" type="checkbox"/> Chemical Monitoring Equipment (<i>describe</i>)	MAP5, 3,5,7,10	O2 MONITORS, FOUR GAS MONITORS, GASTEC AIR SAMPLING SYSTEM
	<input checked="" type="checkbox"/> Chemical Protective Aprons/Coats	MAP5, 2,4,6	NITRILE, NEOPRENE, SPLASH AND RESISTANT
	<input checked="" type="checkbox"/> Chemical Protective Boots	MAP5, 6	NEOPRENE
	<input checked="" type="checkbox"/> Chemical Protective Gloves	MAP 5, 2-9,11	NITRILE, LATEX, BUTYL, PVC
	<input checked="" type="checkbox"/> Chemical Protective Suits (<i>describe</i>)	MAP 5, 6	CHEMICAL SPLASH
	<input checked="" type="checkbox"/> Face Shields	MAP 5,2-8,11	POLYCARBONATE SHEILD, RATCHET HEADGEAR
	<input checked="" type="checkbox"/> First Aid Kits/Stations (<i>describe</i>)	ALL AREAS	ANSI Z308.1-1998 COMPLIANT
	<input checked="" type="checkbox"/> Hard Hats	MAP 5,2-8,11	ANSI Z89.1-2003 COMPLIANT
	<input checked="" type="checkbox"/> Plumbed Eye Wash Stations	MAP 4	BRADLEY PEDESTAL – ONE FAUCET MOUNT
	<input checked="" type="checkbox"/> Portable Eye Wash Kits (<i>i.e. bottle type</i>)	MAP 4	EYESALINE 32OZ DOUBLE STATIONS
	<input checked="" type="checkbox"/> Respirator Cartridges (<i>describe</i>)	MAP 5,2-8	ORGANIC VAPOR/ACID GASSES
	<input checked="" type="checkbox"/> Safety Glasses/Splash Goggles	ALL AREAS	ANSI Z87.1-2003 COMPLIANT / NON-VENTED
	<input checked="" type="checkbox"/> Safety Showers	MAP 4	BRADLEY COMBINATION WITH EYEWASH
	<input type="checkbox"/> Self-Contained Breathing Apparatuses (SCBA)		
	<input type="checkbox"/> Other (<i>describe</i>)		
Fire Extinguishing Systems	<input checked="" type="checkbox"/> Automatic Fire Sptinkler Systems	ALL AREAS	FULL FACILITY FIRE SPRINKLER SYSTEM
	<input checked="" type="checkbox"/> Fire Alarm Boxes/Stations	MAP 5, 10	MONITORED 24/7 BY OUTSIDE COMPANY
	<input type="checkbox"/> Fire Extinguisher Systems (<i>describe</i>)		
	<input type="checkbox"/> Other (<i>describe</i>)		
Spill Control Equipment and Decontamination Equipment	<input checked="" type="checkbox"/> Absorbents (<i>describe</i>)	MAP 5,2-9, 11	NEW PIG MATS, SOCKS, LITE-DRI
	<input checked="" type="checkbox"/> Berms/Dikes (<i>describe</i>)	MAP 5,2, 4-6	NEW PIG SOCKS AND POLY DIKES
	<input type="checkbox"/> Decontamination Equipment (<i>describe</i>)		
	<input type="checkbox"/> Emergency Tanks (<i>describe</i>)		
	<input type="checkbox"/> Exhaust Hoods		
	<input type="checkbox"/> Gas Cylinders Leak Repair Kits (<i>describe</i>)		
	<input type="checkbox"/> Neutralizers (<i>describe</i>)		
	<input checked="" type="checkbox"/> Overpack Drums	MAP 5, 6	NEW PIG
	<input type="checkbox"/> Sumps (<i>describe</i>)		
	<input type="checkbox"/> Other (<i>describe</i>)		
Communications and Alarm Systems	<input type="checkbox"/> Chemical Alarms (<i>describe</i>)		
	<input type="checkbox"/> Intercoms/ PA Systems		
	<input checked="" type="checkbox"/> Portable Radios	ALL AREAS	CARRIED BY ALL SECURITY,FACILITIES,SAFETY
	<input checked="" type="checkbox"/> Telephones	ALL AREAS	VOIP COMPANY PHONES, CELLS, SAT PHONE
	<input type="checkbox"/> Underground Tank Leak Detection Monitors		
	<input type="checkbox"/> Other (<i>describe</i>)		
Additional Equipment (Use Additional Pages if Needed.)			

* Use the Location Codes (LC) from the Site Map(s) prepared for your Contingency Plan.

** Describe the equipment and its capabilities. If applicable, specify any testing/maintenance procedures/intervals. Attach additional pages, numbered appropriately, if needed.



EMERGENCY RESPONSE TEAM

REV – 11/09

The SpaceX on-site Emergency Response Team consists of the following members:

All uniformed Security personnel

The Security Manager

All Facilities personnel, including the three Hazardous Materials Technicians

The Facilities Manager

The EHS Manager

All of the above employees are connected at all times by multi-channel radios that are used to relay information regarding any emergency situations throughout the facility. In the event of a hazardous materials release or spill, the hazardous materials technicians will be alerted to assess the situation. They will determine the material involved and the extent of the release or spill. The area will be made safe and spill containment products will be used to limit the extent of the spill. At this point, the determination will be made to clean up in house or call our waste management contractor to come out and assist. In general, spills of less than 100 gallons will be handled by our on-site emergency response team. A complete investigation and corrective action plan will be implemented, and documented, for every hazardous materials release or spill. This report will be stored in hard copy in the EHS Department as well as in an online archive.

In the event that an emergency evacuation is required, the Emergency Response Team will be assisted by the Factory Safety Team, a safety committee that consists of managers, supervisors and hourly personnel, some of which are already members of the Emergency Response Team.



**FOR
EMERGENCY
SPILL
OR INCIDENT**

CALL 800-618-8830

24 HOUR RESPONSE



Ecology Management, Inc.



FACILITY MAPS EXPLANATIONS

REV- 11/09

MAP 1 – This is the Hawthorne facility primary Evacuation Map.

MAP 2 – This map indicates the areas for the major workplace hazards at the Hawthorne facility.

MAP 3 – This map indicates the primary facility components and their locations.

MAP 4 – This map indicates the locations of the emergency equipment at the Hawthorne facility. This map is referenced in the "Location" column on the Emergency Equipment Inventory Table.

MAP 5 – This map is the primary reference cited in the "Location" column on the Emergency Equipment Inventory Table. Here is the key for the map:

SECTION 1 – Shipping/Receiving, Inventory, Precision Inspection.

SECTION 2 – Propulsion Department

SECTION 3 – Structures Fab/Propulsion Welding

SECTION 4 – Structures Test Area

SECTION 5 – Tooling Machine Shop/Welding Area

SECTION 6 – HAZMAT AREA

SECTION 7 – Structures Production Area

SECTION 8 – Structures Department/Composites Fab Shop

SECTION 9 – Avionics Department

SECTION 10 – Front Office Area

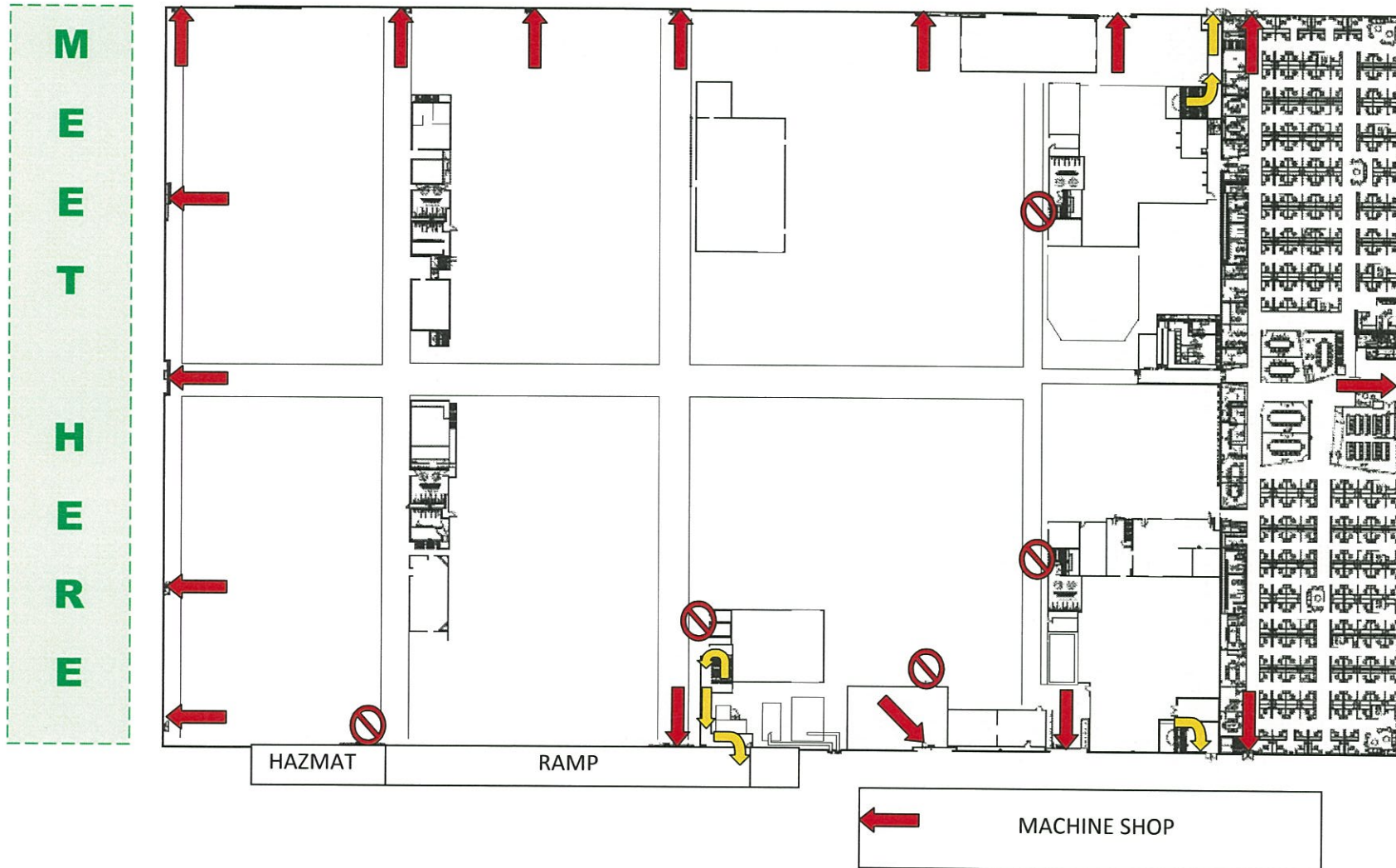
SECTION 11 – Machine Shop

Contains Sensitive Proprietary and Confidential Information –
Not for Further Distribution Without the Express Written Consent of Space Exploration Technologies



EMERGENCY EVACUATION

LEGEND: EXIT DOOR GARAGE LEVEL EXIT NO EXIT YOU ARE HERE





MAJOR WORKPLACE HAZARDS

1
Compressed
Gas Storage
Area

2
Inside
Propane
Storage and
Use Areas

3
Tank farm

4
High Pressure
Testing -
Propulsion

5
High Pressure
Testing -
Structures

6
Hazmat
Storage and
Waste Area

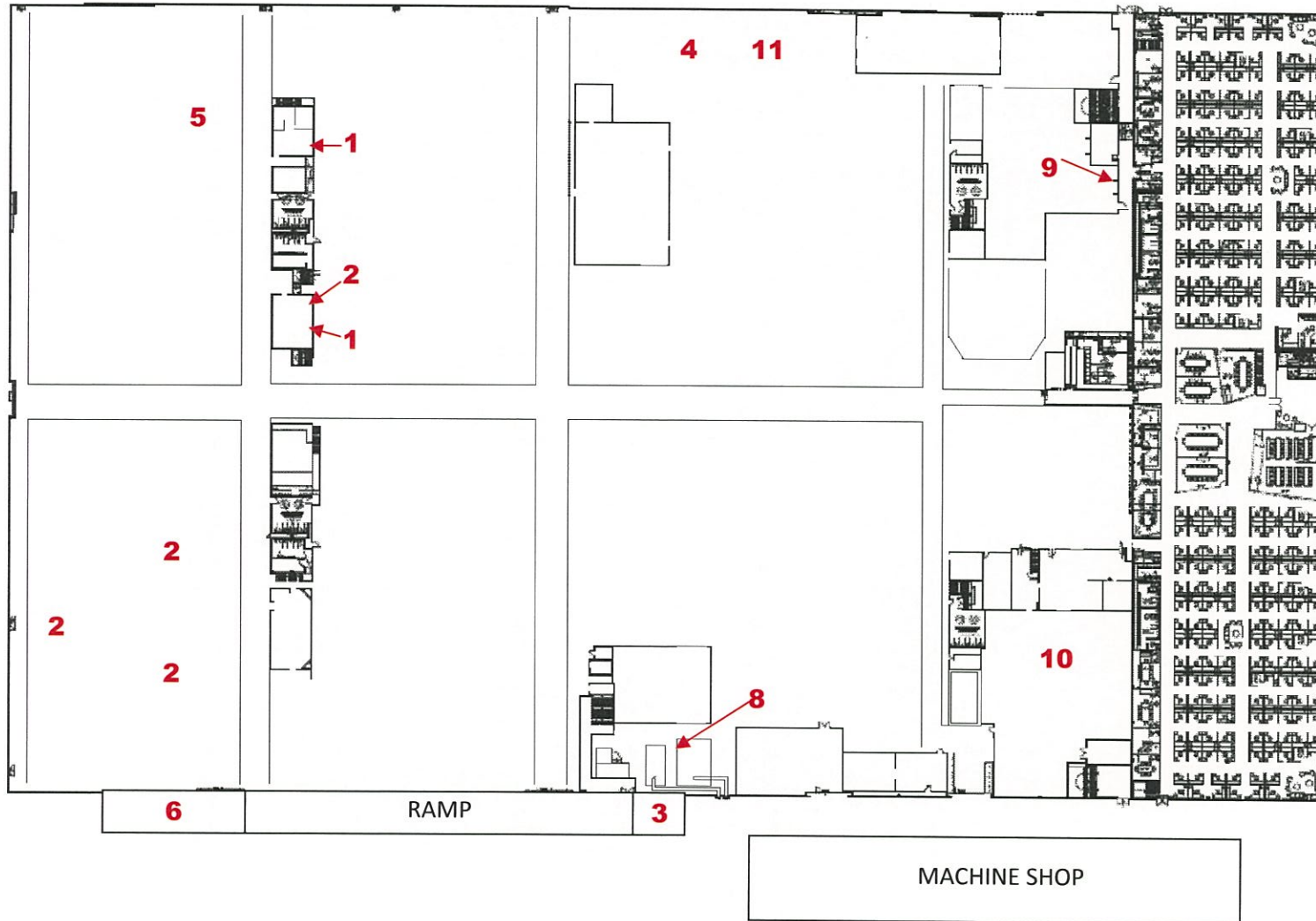
7
Outside
Propane
Storage

8
Composites
Ovens

9
Magazines

10
Avionics
Test Lab

11
RP-1 in Test
Stand

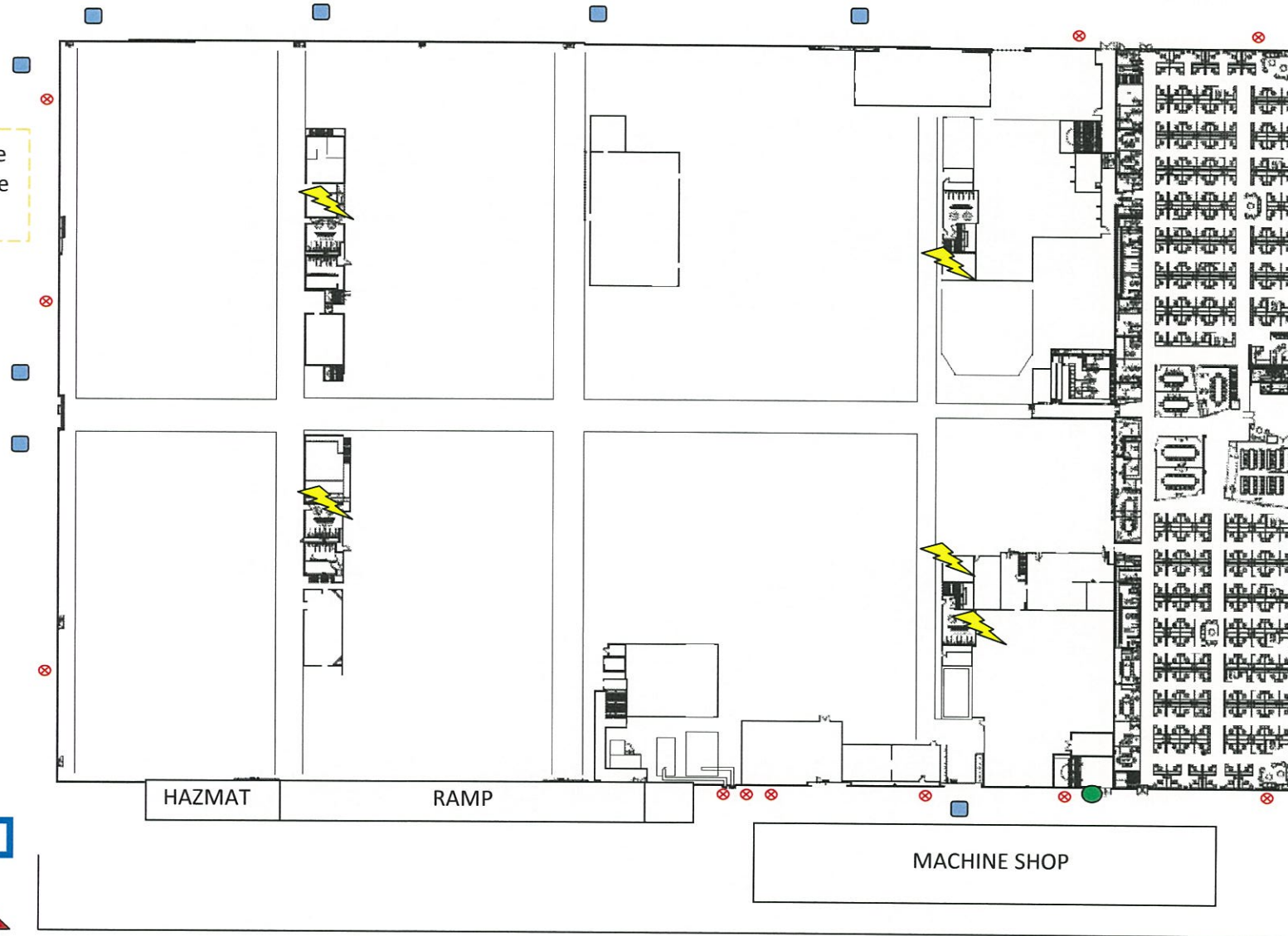




SPACE EXPLORATION TECHNOLOGIES
1 ROCKET ROAD
HAWTHORNE, CA. 90250
310.363.6000

LEGEND: PROPERTY ACCESS GAS SHUT-OFF WATER SHUT-OFF PIVs STORMDRAINS ELECTRICAL SHUT-OFF (3 in garage, too) N

Approximate
building scale
1" = 90'



C
R
E
N
S
H
A
W

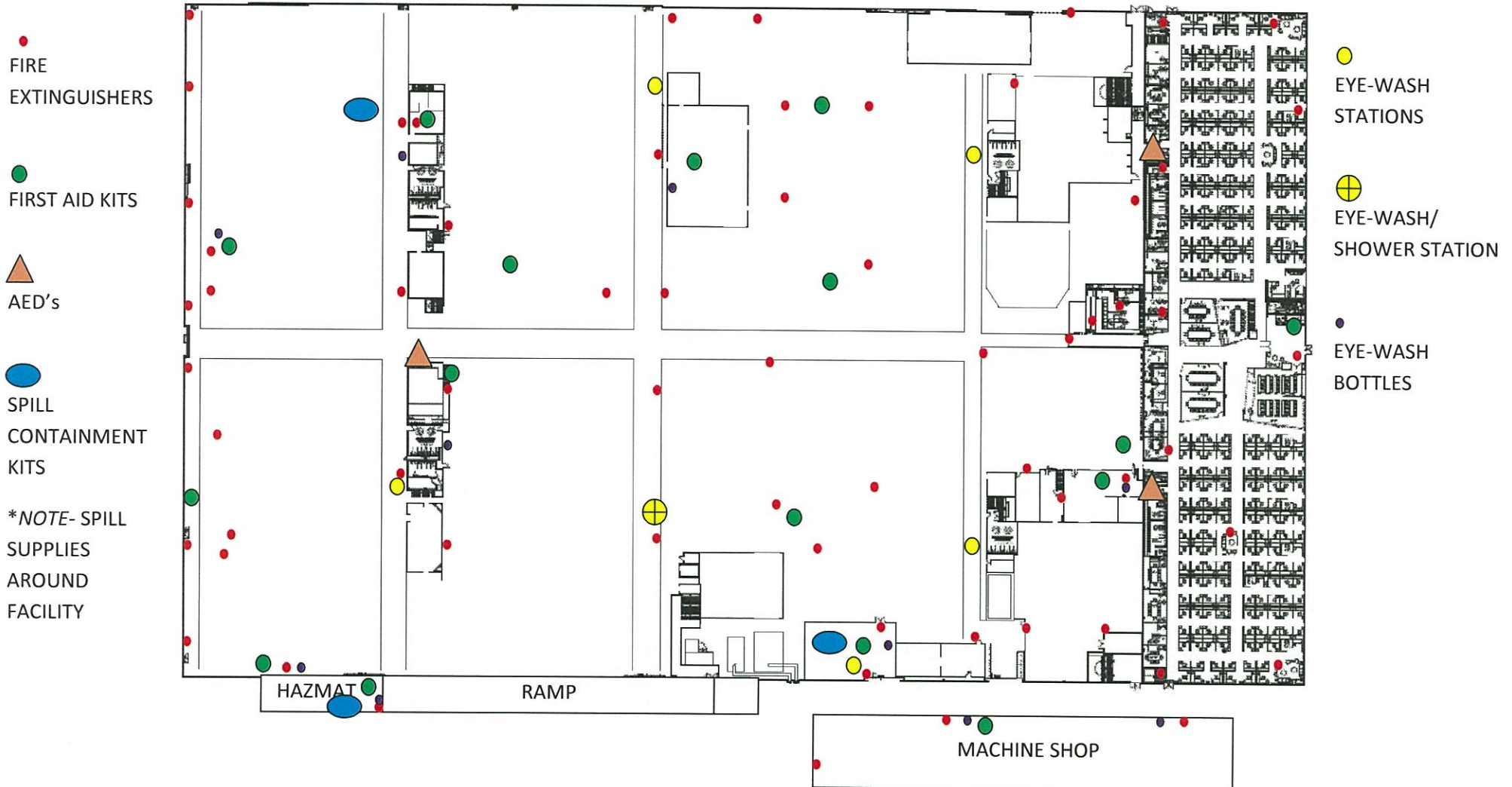
B
L
V
D

JACK NORTHRUP BLVD

Rev - 11/09

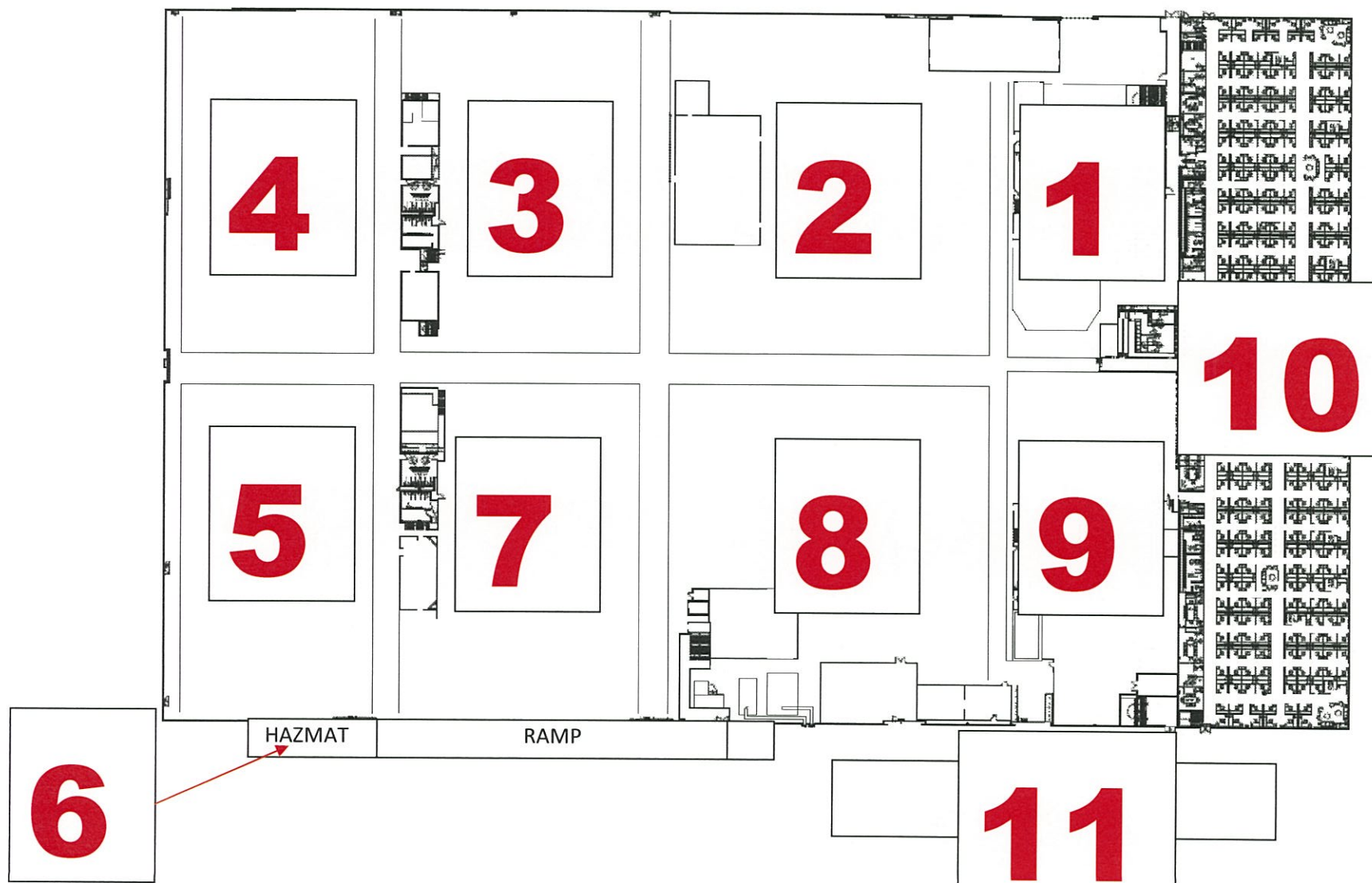


EMERGENCY EQUIPMENT





Emergency Equipment Location Key





TRAINING REQUIREMENTS

HAZARDOUS MATERIALS TECHNICIAN

The hazardous materials technician is part of the Manufacturing Department and more specifically the Facilities division. They report to the Facilities supervisor, though the EHS Manager has broad oversight of their activities.

Training Requirements - General

All SpaceX personnel are trained in at least Hazard Communication and Fire Safety. All Facilities personnel are also trained in at least Personal Protective Equipment and Lock Out/Tag Out. All Facilities personnel are also trained and certified Forklift Operators.

Training Requirements – Specific

All hazardous materials technicians are trained and certified, at a minimum, to this level:

- RCRA Hazardous Materials Management, Federal and California
(annual refresher training required)

- DOT Hazardous Materials Management
(annual refresher training required)

- 24 HR HAZWOPER Certification
(annual refresher training required)

Additional desired training:

- 40 HR HAZWOPER Certification
(annual refresher training required)

- First Aid/CPR/AED Certification
(certification good for two years)



HAZARDOUS MATERIALS TECHNICIANS

Updated November 20, 2009

DENNIS JONES – FACILITIES SUPERVISOR/HAZARDOUS MATERIALS TECHNICIAN

Training - Specific

RCRA Hazardous Materials Management, Federal and California

DOT Hazardous Materials Management

40 HR HAZWOPER Certification

First Aid/CPR/AED Certification

MARK DROP – HAZARDOUS MATERIALS TECHNICIAN/FACILITIES TECHNICIAN

Training - Specific

RCRA Hazardous Materials Management, Federal and California

DOT Hazardous Materials Management

40 HR HAZWOPER Certification

ANDREW WALES - HAZARDOUS MATERIALS TECHNICIAN/FACILITIES TECHNICIAN

Training - Specific

RCRA Hazardous Materials Management, Federal and California

DOT Hazardous Materials Management

40 HR HAZWOPER Certification

Safety Management Systems

Certificate Awarded to

Dennis Jones

has successfully completed

**RCRA / DOT HAZARDOUS MATERIALS TRAINING
(California Waste Management)**

As required by the CCR Title 22, 66265.16 & 49 CFR Subpart H & I: on this day:
November 9, 2009



A handwritten signature in black ink, appearing to read "Gil Prieto", written over a horizontal line.

Gil Prieto

(800) 922-3520 www.SafetyCat.com

Certificate #91940

Safety Management Systems

Certificate Awarded to

Dennis Jones

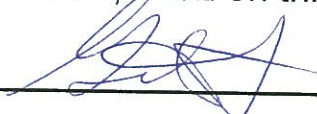
has successfully completed

Hazardous Waste Operations and Emergency Response

40 Hr - General Site Worker

Certificate #91973

40 Hours of Hazardous Waste Operations and Emergency Response
Training as required by the Code of Federal Regulations 29, 1910.120 and the
California Code of Regulations Title 8, 5192 on this day: **November 10-13, 2009**



Gil Prieto



Safety Management Systems: SafetyCat.com, (800) 922-3520

Safety Management Systems

Certificate Awarded to

Mark Drop

has successfully completed

**RCRA / DOT HAZARDOUS MATERIALS TRAINING
(California Waste Management)**

As required by the CCR Title 22, 66265.16 & 49 CFR Subpart H & I: on this day:
September 14, 2009



A blue ink signature, appearing to read "Gil Prieto", written over a horizontal line.

Gil Prieto

(800) 922-3520 www.SafetyCat.com

Certificate #91531

Safety Management Systems

Certificate Awarded to

Mark Drop

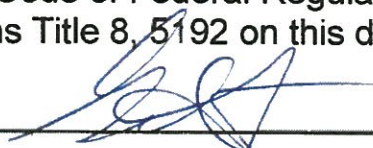
has successfully completed

Hazardous Waste Operations and Emergency Response

40 Hr - General Site Worker

Certificate #91564

40 Hours of Hazardous Waste Operations and Emergency Response
Training as required by the Code of Federal Regulations 29, 1910.120 and the
California Code of Regulations Title 8, 5192 on this day: **September 15-18, 2009**



Gil Prieto



Safety Management Systems: SafetyCat.com, (800) 922-3520

Safety Management Systems

Certificate Awarded to

Andy Wales

has successfully completed

**RCRA / DOT HAZARDOUS MATERIALS TRAINING
(California Waste Management)**

As required by the CCR Title 22, 66265.16 & 49 CFR Subpart H & I: on this day:
September 14, 2009




Gil Prieto

(800) 922-3520 www.SafetyCat.com

Certificate #91532

Safety Management Systems

Certificate Awarded to

Andy Wales

has successfully completed

**Hazardous Waste Operations and Emergency Response
40 Hr - General Site Worker**

Certificate #91565

40 Hours of Hazardous Waste Operations and Emergency Response
Training as required by the Code of Federal Regulations 29, 1910.120 and the
California Code of Regulations Title 8, 5192 on this day: **September 15-18, 2009**



Gil Prieto



Safety Management Systems: SafetyCat.com, (800) 922-3520

LAND DISPOSAL RESTRICTION NOTIFICATION FORM

Pursuant to CCR Title 22, Section 66268.7(40 CFR 268.7(a), I hereby notify that this waste shipment contains one or more of the following wastes restricted under the land disposal restrictions for which applicable treatment standards are set forth in CCR Title 22, Section 66268.40 (40 CFR 268.40)

Manifest Num.000765123 JJK Generator Name : SPACEX EPA# CAR000191536						
RCRA HAZARDOUS WASTE INFORMATION						
U.S.F. PROFILE NUMBER/ MANIFEST LINE ITEM NUMBER	List all D, F, K, U & P Codes	Subcategory (IF ANY)	WASTEWATER*/ NONWASTEWATER WW NWW		California List ** Per CCR Title 22, Section 66268.32	Hazardous Debris Subject To CCR Title 22, Sec 66268.45
1) AP169390	D006, D007			X	<input type="checkbox"/> For: _____	<input type="checkbox"/>
2) 350728-47				X	<input type="checkbox"/> For: _____	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>

ADDITIONAL INFORMATION FOR D001, D002, D012-43, F001-5 & F039 WASTE STREAMS: (check one)

☒ There are no underlying hazardous constituents (UHCs) present

☐ There are underlying hazardous constituents (UHCs) present which do not meet treatment standards per CCR Title 22, Section 66268.48
(Use the attached UTS Table and check the appropriate constituent(s) present in the waste stream)

DETERMINATION BASED UPON : (check one)

☒ Knowledge of the process generating the waste and the raw materials used and the reaction products

☐ Results from analytical testing Analytical results attached ☐ YES ☐ NO

TERM DEFINITIONS:

* **WASTEWATER** = per CCR Title 22, Section 66260.10, WASTE THAT CONTAINS LESS THAN 1% BY WEIGHT TOTAL TOXIC ORGANICS (TOCs) AND 1% BY WEIGHT TOTAL SUSPENDED SOLIDS (TSS).

* **CALIFORNIA LIST**= THE FOLLOWING HAZARDOUS WASTES ARE PROHIBITED FROM LAND DISPOSAL: per CCR Title 22, Section 66268.32

- Liquid hazardous waste with a pH less than or equal to 2.0
- Liquid hazardous waste containing PCB's at concentration of greater than or equal to 50 ppm
- Liquid hazardous waste, including free liquids associated with any solids/sludge, containing free cyanide at concentrations greater than or equal to 1,000 mg/L
- Liquid hazardous waste, including free liquids associated with any solids/sludge, containing metals at concentrations greater than or equal to the following:

ARSENIC	500 mg/L	MERCURY	20 mg/L
CADMIUM	100 mg/L	NICKEL	134 mg/L
CHROMIUM	500 mg/L	SELENIUM	100 mg/L
LEAD	500 mg/L	THALLIUM	130 mg/L

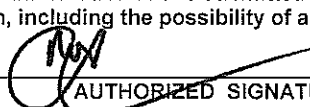
- Liquid hazardous waste, that contains HOC's in total concentration greater than or equal to 1,000 mg/L
- Non-liquid RCRA hazardous waste containing HOC's in total concentration greater than or equal to 1,000 mg/L

CERTIFICATION

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification. I believe that the information I have submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment

SPACEX

COMPANY NAME



AUTHORIZED SIGNATURE

01/21/09

DATE



Rho Chem Corporation,
a wholly owned subsidiary of PHILIP SERVICES CORP.,
RCRA Land Disposal Restriction Notification Form EZ

Generator: SPACEX

EPA I.D. #: CAR000191536

Profile #: 390575-00

Manifest #: 000765125JJK

The wastes identified on this form are subject to the land disposal restrictions of 40 CFR Part 268. The wastes do not meet the treatment standards specified in 268.32. Pursuant to 40 CFR 268.7(a), the required information applicable to each waste is identified below (check all boxes that apply):

Treatability Group: ☐ Wastewater ☐ Nonwastewater
(Wastewaters contain less than 1% filterable solids and less than 1% Total Organic Carbon)

- ☒ **D001 Ignitable (except for High TOC) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems**
(Complete form UC, unless D001 is the only "D" code and the waste is to be combusted or recovered.)
- ☐ D001 Ignitable (except for High TOC) managed in CWA/ CWA-equivalent/Class I SDWA systems
- ☐ D001 High TOC Ignitable (greater than 10% total organic carbon)
- ☐ **D002 Corrosive managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems (Complete form UC)**
- ☐ D002 Corrosive managed in CWA/ CWA-equivalent/Class I SDWA systems
- ☐ D003 Reactive Sulfides based on 261.23(a)(5)
- ☐ D003 Reactive Cyanides based on 261.23(a)(5)
- ☐ **D003 Water Reactives based on 261.23(a)(2),(3) and (4) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems (Complete form UC)**
- ☐ D003 Water Reactives based on 261.23(a)(2),(3) and (4) managed in CWA/ CWA-equivalent/Class I SDWA systems
- ☐ **D003 Other Reactives based on 261.23(a)(1) (Complete form UC)**

If D004-43 boxes are checked, complete and attach Form UC to address underlying hazardous constituents (unless these wastes are to be managed in CWA/CWA-equivalent/Class I SDWA systems):

- | | | | |
|--|---|---|--|
| <input type="checkbox"/> D004 Arsenic | <input type="checkbox"/> D005 Barium | <input type="checkbox"/> D006 Cadmium | <input type="checkbox"/> D006 Cadmium-containing batteries |
| <input type="checkbox"/> D007 Chromium | <input type="checkbox"/> D008 Lead | <input type="checkbox"/> D008 Lead acid batteries | |
| <input type="checkbox"/> D009 High mercury inorganic (>260 mg/kg total), including incinerator residue and residues from RMERC | | | |
| <input type="checkbox"/> D009 High-mercury organic (>260 mg/kg total), not including incinerator residue | | | |
| <input type="checkbox"/> D009 Low-mercury (<260 mg/kg total) | | <input type="checkbox"/> D009 All D009 wastewaters | |
| <input type="checkbox"/> D010 Selenium | <input type="checkbox"/> D011 Silver | | |
| <input type="checkbox"/> D012 Endrin | <input type="checkbox"/> D023 <i>o</i> -Cresol | <input type="checkbox"/> D033 Hexachlorobutadiene | |
| <input type="checkbox"/> D013 Lindane | <input type="checkbox"/> D024 <i>m</i> -Cresol | <input type="checkbox"/> D034 Hexachloroethane | |
| <input type="checkbox"/> D014 Methoxychlor | <input type="checkbox"/> D025 <i>p</i> -Cresol | <input type="checkbox"/> D035 Methyl ethyl ketone | |
| <input type="checkbox"/> D015 Toxaphene | <input type="checkbox"/> D026 Cresols (Total) | <input type="checkbox"/> D036 Nitrobenzene | |
| <input type="checkbox"/> D016 2,4-D | <input type="checkbox"/> D027 <i>p</i> -Dichlorobenzene | <input type="checkbox"/> D037 Pentachlorophenol | |
| <input type="checkbox"/> D017 2,4,5-TP (Silvex) | <input type="checkbox"/> D028 1,2-Dichloroethane | <input type="checkbox"/> D038 Pyridine | |
| <input type="checkbox"/> D018 Benzene | <input type="checkbox"/> D029 1,1-Dichloroethylene | <input type="checkbox"/> D039 Tetrachloroethylene | |
| <input type="checkbox"/> D019 Carbon tetrachloride | <input type="checkbox"/> D030 2,4-Dinitrotoluene | <input type="checkbox"/> D040 Trichloroethylene | |
| <input type="checkbox"/> D020 Chlordane | <input type="checkbox"/> D031 Heptachlor | <input type="checkbox"/> D041 2,4,5-Trichlorophenol | |
| <input type="checkbox"/> D021 Chlorobenzene | <input type="checkbox"/> D032 Hexachlorobenzene | <input type="checkbox"/> D042 2,4,6-Trichlorophenol | |
| <input type="checkbox"/> D022 Chloroform | | <input type="checkbox"/> D043 Vinyl chloride | |

Note: If any bolded entries are checked, form UC must be completed to address underlying hazardous constituents, unless the material is treated in a Clean Water Act (CWA) treatment process or unless otherwise noted above.

In addition, the following wastes are included in this shipment:

- ☐ F001-F005 spent solvents. (If this box is checked, complete the F001-F005 section on the back of this form. Check the hazardous waste number(s) that applies, and identify the constituents likely to be present in the waste.)

If this shipment carries additional waste codes that are not addressed above, identify them here:

<u>EPA Waste Code</u>	<u>Subcategory (if applicable)</u>	<u>EPA Waste Code</u>	<u>Subcategory (if applicable)</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

F001-F005 Spent Solvents

Check the box(es) that applies; identify the individual constituents likely to be present.

<u>Hazardous waste description</u>	<u>Regulated hazardous constituents</u>	
<input type="checkbox"/> F001 Spent halogenated solvents used in degreasing	Carbon tetrachloride Tetrachloroethylene Trichloroethylene Trichloromonofluoromethane	Methylene chloride 1,1,1-Trichloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane
<input type="checkbox"/> F002 Spent halogenated solvents	Chlorobenzene Methylene chloride 1,1,1-Trichloroethane Trichloroethylene Trichloromonofluoromethane	<i>o</i> -Dichlorobenzene Tetrachloroethylene 1,1,2-Trichloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane
<input type="checkbox"/> F003 Spent non-halogenated solvents	Acetone Cyclohexanone* Ethyl benzene Methanol* Xylenes (total)	<i>n</i> -Butyl alcohol Ethyl acetate Ethyl ether Methyl isobutyl ketone
<input type="checkbox"/> F004 Spent non-halogenated solvents	<i>m</i> -Cresol <i>p</i> -Cresol Nitrobenzene	<i>o</i> -Cresol Cresol-mixed isomers (cresylic acid)
<input type="checkbox"/> F005 Spent non-halogenated solvents	Benzene 2-Ethoxyethanol Methyl ethyl ketone Pyridine	Carbon disulfide* Isobutyl alcohol 2-Nitropropane Toluene

*The treatment standards for carbon disulfide, cyclohexanone, and methanol nonwastewaters are based on the TCLP and apply to spent solvent nonwastew containing only one, two, or all three of these constituents. The treatment standards for these three constituents do not apply when any of the other F001-F constituents are present in the waste.

Hazardous Debris

- ☐ This shipment contains hazardous debris that will be treated to comply with the alternative treatment standards of 268.45 (e.g., macroencapsulation or a blasting).

(The definitions of "debris" and "hazardous debris" are in 40 CFR 268.2. Per 268.45, hazardous debris must be treated for each "contaminant subject to treatment." To determine these, look up the waste code in 268.40 and list the regulated hazardous constituents for each code.)

The contaminants subject to treatment for this debris are identified below:

<u>EPA Waste Code</u>	<u>Subcategory</u>	<u>Contaminants subject to treatment</u>	
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Rho Chem Corporation,
a wholly owned subsidiary of PHILIP SERVICES CORP.,
RCRA Land Disposal Restriction Notification Form UC

Generator: SPACEX U.S. EPA I.D. #: CAR000191536

Profile #: 390575-00 Manifest #: 000765125JJK

In accordance with 40 CFR 268.7(a), the underlying hazardous constituents must be addressed in this waste. Per 268.2(i), "underlying hazardous constituent means any constituent listed in 268.48, Table UTS—Universal Treatment Standard which can reasonably be expected to be present at the point of generation of hazardous waste, at a concentration above the constituent-specific UTS treatment standard. Refer to Form-EZ (attached) for the waste code(s), treatability and subcategory applicable to this waste.

In order to address underlying hazardous constituents in characteristic wastes, please check the appropriate box:

- ☒ I have reviewed the UTS list of 268.48, and per 268.7(a), I have determined that there are no underlying hazardous constituents reasonably expected to be present in this waste.
- ☐ I have reviewed the UTS list of 268.48, and per 268.7(a), I have determined that underlying hazardous constituents are present in this waste. The underlying hazardous constituents are identified as follows:

The determination of underlying hazardous constituents was based on:

- ☒ Generator's knowledge of the waste
- ☐ Analysis

I certify that I personally have examined and am familiar with the waste through analysis and testing, or through knowledge of the waste to support this certification. I certify that as an authorized representative of the generator named above, all the information submitted in this notification is true and correct to the best of my knowledge.

MARK DROP
Printed Name

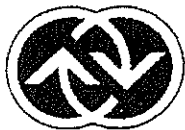

Signature

01/21/09
Date

List of Underlying Hazardous Constituents 40 CFR 268.48

Circle or otherwise identify the underlying hazardous constituents present in the waste:

Organic Constituent	Organic Constituent	Organic Constituent	Organic Constituent
A2213	2-Chlorophenol	Ethyl acetate	Oxamyl
Acenaphthylene	3-Chloropropylene	Ethyl benzene	Parathion
Acenaphthene	Chrysene	Ethyl cyanide/Propanenitrile	Total PCBs(sum of all isomers, or all
Aroclors)			
Acetone	<i>o</i> -Cresol	Ethyl ether	Pebulate
Acetonitrile	<i>m</i> -Cresol	bis(2-Ethylhexyl)phthalate	Pentachlorobenzene
Acetophenone	<i>p</i> -Cresol	Ethyl methacrylate	PeCDDs(All Pentachlorodibenzo- <i>p</i> -dioxi
2-Acetylaminofluorene	<i>m</i> -Cumenyl methylcarbamate	Ethylene oxide	PeCDFs(All Pentachlorodibenzofurans)
Acrolein	Cyclohexanone	Famphur	Pentachloroethane
Acrylamide	<i>o,p'</i> -DDD	Fluoranthene	Pentachloronitrobenzene
Acrylonitrile	<i>p,p'</i> -DDD	Fluorene	Pentachlorophenol
Aldicarb sulfone	<i>o,p'</i> -DDE	Formetanate hydrochloride	Phenacetin
Aldrin	<i>p,p'</i> -DDE	Formparanate	Phenanthrene
4-Aminobiphenyl	<i>o,p'</i> -DDT	Heptachlor	Phenol
Aniline	<i>p,p'</i> -DDT	Heptachlor epoxide	<i>o</i> -Phenylenediamine
Anthracene	Dibenz(a,h)anthracene	Hexachlorobenzene	Phorate
Aramite	Dibenz(a,e)pyrene	Hexachlorobutadiene	Phthalic acid
alpha-BHC	1,2-Dibromo-3-chloropropane	Hexachlorocyclopentadiene	Phthalic anhydride
beta-BHC	1,2-Dibromoethane/Ethylene dibromide	HxCDDs(All Hexachlorodibenzo- <i>p</i> -dioxins)	Physostigmine
delta-BHC	Dibromomethane	HxCDFs(All Hexachlorodibenzofurans)	Physostigmine salicylate
gamma-BHC	<i>m</i> -Dichlorobenzene	Hexachloroethane	Promecarb
Barban	<i>o</i> -Dichlorobenzene	Hexachloropropylene	Pronamide
Bendiocarb	<i>p</i> -Dichlorobenzene	Indeno(1,2,3- <i>c,d</i>)pyrene	Propham
Bendiocarb phenol	Dichlorodifluoromethane	Iodomethane	Propoxur
Benomyl	1,1-Dichloroethane	Isobutyl alcohol	Prosulfocarb
Benzene	1,2-Dichloroethane	Isodrin	Pyrene
Benz(a)anthracene	1,1-Dichloroethylene	Isolan	Pyridine
Benzal chloride	<i>trans</i> -1,2-Dichloroethylene	Isosafrole	Safrole
Benzo(b)fluoranthene	2,4-Dichlorophenol	Kepone	Silvex/2,4,5-TP
Benzo(k)fluoranthene	2,6-Dichlorophenol	Methacrylonitrile	1,2,4,5-Tetrachlorobenzene
Benzo(g,h,i)perylene	2,4-Dichlorophenoxyacetic acid/2,4-D	Methanol	TCDDs(All Tetrachlorodibenzo- <i>p</i> -dioxins)
Benzo(a)pyrene	1,2-Dichloropropane	Methapyrilene	TCDFs(All Tetrachlorodibenzofurans)
Bromodichloromethane	<i>cis</i> -1,3-Dichloropropylene	Methiocarb	1,1,1,2-Tetrachloroethane
Bromomethane/Methyl bromide	<i>trans</i> -1,3-Dichloropropylene	Methomyl	1,1,2,2-Tetrachloroethane
4-Bromophenyl phenyl ether	Dieldrin	Methoxychlor	Tetrachloroethylene
<i>n</i> -Butyl alcohol	Diethylene glycol, dicarbamate	3-Methylcholanthrene	2,3,4,6-Tetrachlorophenol
Butylate	Diethyl phthalate	4,4-Methylene-bis(2-chloroaniline)	Thiodicarb
Butyl benzyl phthalate	<i>p</i> -Dimethylaminoazobenzene	Methylene chloride	Thiophanate-methyl
2-sec-Butyl-4,6-dinitrophenol/Dinoseb	2,4-Dimethyl phenol	Methyl ethyl ketone	Tirpate
Carbaryl	Dimethyl phthalate	Methyl isobutyl ketone	Toluene
Carbenzadim	Dimetilan	Methyl methacrylate	Toxaphene
Carbofuran	Di- <i>n</i> -butyl phthalate	Methyl methansulfonate	Triallate
Carbofuran phenol	1,4-Dinitrobenzene	Methyl parathion	Tribromomethane/Bromoform
Carbon disulfide	4,6-Dinitro- <i>o</i> -cresol	Metolcarb	2,4,6-Tribromophenol
Carbon tetrachloride	2,4-Dinitrophenol	Mexacarbate	1,2,4-Trichlorobenzene
Carbosulfan	2,4-Dinitrotoluene	Molinate	1,1,1-Trichloroethane
Chlordane (alpha and gamma isomers)	2,6-Dinitrotoluene	Naphthalene	1,1,2-Trichloroethane
<i>p</i> -Chloroaniline	Di- <i>n</i> -octyl phthalate	2-Naphthylamine	Trichloroethylene
Chlorobenzene	Di- <i>n</i> -propylnitrosamine	<i>o</i> -Nitroaniline	Trichloromonofluoromethane
Chlorobenzilate	1,4-Dioxane	<i>p</i> -Nitroaniline	2,4,5-Trichlorophenol
2-Chloro-1,3-butadiene	Diphenylamine	Nitrobenzene	2,4,6-Trichlorophenol
Chlorodibromomethane	Diphenylnitrosamine	5-Nitro- <i>o</i> -toluidine	2,4,5-Trichlorophenoxyacetic acid/2,4,5-
Chloroethane	1,2-Diphenylhydrazine	<i>o</i> -Nitrophenol	1,2,3-Trichloropropane
bis(2-Chloroethoxy)methane	Disulfoton	<i>p</i> -Nitrophenol	1,1,2-Trichloro-1,2,2-trifluoroethane
bis(2-Chloroethyl)ether	Dithiocarbamates (total)	N-Nitrosodiethylamine	Triethylamine
Chloroform	Endosulfan I	N-Nitrosodimethylamine	tris-(2,3-Dibromopropyl)phosphate
bis(2-Chloroisopropyl)ether	Endosulfan II	N-Nitroso-di- <i>n</i> -butylamine	Vernolate
<i>p</i> -Chloro- <i>m</i> -cresol	Endosulfan sulfate	N-Nitrosomethylethylamine	Vinyl chloride
2-Chloroethyl vinyl ether	Endrin	N-Nitrosomorpholine	Xylenes-mixed isomers
Chloromethane/Methyl chloride concentrations)	Endrin aldehyde	N-Nitrosopiperidine	(sum of <i>o</i> -, <i>m</i> -, and <i>p</i> -xylene
2-Chloronaphthalene	EPTC	N-Nitrosopyrrolidine	
Inorganic Constituent	Inorganic Constituent	Inorganic Constituent	Inorganic Constituent
Antimony	Cadmium	Lead	Silver
Arsenic	Chromium (Total)	Mercury-Nonwastewater from Retort	Sulfides
Barium	Cyanides (Total)	Mercury-All Others	Thallium
Beryllium	Cyanides (Amenable)	Nickel	



Pacific
Resource
Recovery

3150 East Pico Boulevard, Los Angeles, CA 90023
Phone (800) 499-7145 Fax (213) 780-0078

LAND DISPOSAL RESTRICTION NOTIFICATION

Manifest Line #	Approval #	Manifest Line #	Approval #	Manifest Line #	Approval #

This notification form shall be completed by the generator and shall accompany each shipment of restricted waste subject to the Land Disposal Restrictions (40 CFR 268 Subpart C).

- Complete all information in Section I.
- Check mark all appropriate Regulated Constituents in Section II, additional applicable Sections and/or complete Section III.
- Sign and date Section IV.

SECTION I									
GENERATOR'S NAME		SPACEX							
EPA I.D. NUMBER		CAR000191536							
MANIFEST NUMBER		000765127 JJK							
TREATABILITY GROUP		(Check one) <input type="checkbox"/> Wastewater <input checked="" type="checkbox"/> Non-Wastewater							
HAZARDOUS DEBRIS		<input type="checkbox"/> Yes <input type="checkbox"/> No							
EPA HAZARDOUS WASTE CODE(S) -									
D001									
<input checked="" type="checkbox"/> There are no underlying hazardous constituents of concern, or									
<input type="checkbox"/> There are underlying hazardous constituents of concern which do not meet the treatment standards of 40 CFR 268.48, Table UTS - Universal Treatment Standards (see Section II).									
I have used the following to make the above determination:									
<input checked="" type="checkbox"/> Knowledge of the waste producing process, raw materials used and reaction products, or									
<input type="checkbox"/> Results of analysis for the constituents in Table UTS.									
Waste analysis data attached? <input type="checkbox"/> Yes <input type="checkbox"/> No									

NON-RCRA WASTE <input type="checkbox"/> LIQUID <input type="checkbox"/> SOLID Effective 1/31/96 - Pursuant to Section 25179.6 of the Health and Safety Code, NON-RCRA aqueous and solid waste containing organics has been repealed from Land Disposal Restriction Notification requirements.	(Check all that apply) <input type="checkbox"/> 11a <input type="checkbox"/> 11b <input type="checkbox"/> 11c <input type="checkbox"/> 11d <input type="checkbox"/> other (28a - 28i) <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>										

UNIVERSAL TREATMENT STANDARDS

SECTION II
<p>The Underlying Hazardous Constituents must be identified for waste streams which carry the EPA Waste Codes F001-F005, F039, D001 (only D001 not treated by RORGs; CMBST or POLYM), D005-D043 (only D005-D043 if treated in Non-CWA, Non-CWA equivalent or Non-SDWA facilities).</p> <p>The wastes identified on the aforementioned manifest document number and bearing the EPA Hazardous Waste Number(s) identified in Section I are subject to the Land Disposal Restrictions of 40 CFR 268 Subpart C. The wastes do not meet the applicable treatment standards specified in 40 CFR 268 Subpart D or exceeds the applicable prohibition levels specified in 40 CFR 268.32 (California list wastes) or RCRA Section 3004(d). In compliance with the requirements of 40 CFR 268.7 and 268.9 we are indicating below the applicable constituents of concern.</p>



ADDITIONAL RESTRICTED WASTE IDENTIFICATION/ TREATMENT STANDARDS AND CERTIFICATION FORM

Complete Section III if the restricted wastes (i.e., EPA Hazardous Waste Code) as listed in Section I do not meet the applicable treatment standards in 40 CFR 268.40 (Treatment Standards for Hazardous Wastes) and have not been identified as required in Section II.

[illegible]

Company Name: SPACEX

Authorized Signature:

Printed Name:

Date:

40 CFR 268.48 TABLE UTS - UNIVERSAL TREATMENT STANDARDS (Continued)

Regulated constituent - common name	CAS ¹ NO.	Water-soluble standard concentration in mg/L	Non-water-soluble standard concentration in mg/L TCLP ²	Regulated constituent - common name	CAS ¹ NO.	Water-soluble standard concentration in mg/L	Non-water-soluble standard concentration in mg/L TCLP ²	Regulated constituent - common name	CAS ¹ NO.	Water-soluble standard concentration in mg/L	Non-water-soluble standard concentration in mg/L TCLP ²
Acenaphthylene	208-66-8	0.059	3.4	m-Dichlorobenzene	541-73-1	0.036	6	p-Nitroaniline	100-01-6	0.028	28
Acenaphthene	83-32-9	0.059	3.4	o-Dichlorobenzene	95-50-1	0.088	6	o-Nitroaniline	86-74-4	0.27	14
Acetone	67-64-1	0.28	160	p-Dichlorobenzene	106-46-7	0.090	6	Nitrobenzene	98-95-3	0.068	14
Acetonitrile	75-05-8	5.6	1.8	Dichlorodimethylmethane	75-71-8	0.23	7.2	5-Nitro-o-toluidine	99-55-8	0.32	28
Acetophenone	96-66-2	0.010	9.7	1,1-Dichloroethane	75-34-3	0.059	6	o-Nitrophenol	83-75-5	0.28	13
2-Acetylaminofluorene	53-96-3	0.059	140	1,2-Dichloroethane	107-06-2	0.21	6	p-Nitrophenol	100-02-7	0.12	29
Acrolein	107-02-8	0.29	NA	1,1-Dichloroethylene	75-34-4	0.025	6	N-Nitrosodiethylamine	55-18-5	0.40	28
Acrylamide	79-06-1	19	23	trans-1,2-Dichloroethylene	156-60-5	0.054	30	N-Nitrosodimethylamine	62-75-9	0.40	2.3
Acrylonitrile	107-13-1	0.24	84	2,4-Dichlorophenol	120-83-2	0.044	14	N-Nitroso-di-n-butylamine	924-16-3	0.40	17
Aldrin	309-00-2	0.021	0.066	2,6-Dichlorophenol	87-65-0	0.044	14	N-Nitrosomethylethylamine	10595-95-6	0.40	2.3
4-Aminobiphenyl	92-67-1	0.13	NA	1,2-Dichloropropane	78-87-5	0.85	18	N-Nitrosomorpholine	59-89-2	0.40	2.3
Aniline	62-53-3	0.81	14	cis-1,3-Dichloropropylene	10061-01-5	0.036	18	N-Nitrosopiperidine	100-75-4	0.013	35
Anthracene	120-12-7	0.059	3.4	trans-1,3-Dichloropropylene	10061-02-6	0.036	18	N-Nitrosopyrrolidine	930-55-2	0.013	35
Aramite	140-57-8	0.38	NA	Dieldrin	60-57-1	0.017	0.13	Parathion	56-38-2	0.014	4.6
alpha-BHC	319-84-6	0.00014	0.066	Diethyl phthalate	84-66-2	0.20	28	Pentachlorobenzene	608-93-5	0.055	10
beta-BHC	319-85-7	0.00014	0.066	p-Dimethylaminoazobenzene	60-11-7	0.13	NA	Pentachlorodibenzo-furans	NA	0.000035	0.001
delta-BHC	319-86-8	0.023	0.088	2,4-Dimethyl phenol	105-67-9	0.036	14	Pentachlorodibenzo-p-dioxins	NA	0.000063	0.001
gamma-BHC	58-89-9	0.0017	0.066	Dimethyl phthalate	131-11-3	0.047	28	Pentachloroethane	76-01-7	0.055	6
Benz(a)anthracene	56-55-3	0.059	3.4	Di-n-butyl phthalate	84-74-2	0.057	28	Pentachloronitrobenzene	82-66-8	0.055	4.8
Benzal chloride	98-87-3	0.055	6.0	1,4-Dinitrobenzene	100-25-4	0.32	2.3	Pentachlorophenol	87-86-5	0.089	7.4
Benzene	71-43-2	0.14	10	4,6-Dinitro-o-cresol	534-52-1	0.28	160	Phenacetin	62-44-2	0.081	16
Benzo(a)pyrene	50-32-8	0.061	3.4	2,4-Dinitrophenol	51-28-5	0.12	160	Phenanthrene	85-01-8	0.059	5.6
Benzo(b)fluoranthene	205-99-2	0.11	6.8	2,4-Dinitrotoluene	121-14-2	0.32	140	Phenol	108-95-2	0.039	6.2
Benzo(g,h,i)perylene	191-24-2	0.0055	1.8	2,6-Dinitrotoluene	806-02-2	0.55	28	Phorate	298-02-2	0.021	4.6
Benzo(k)fluoranthene	207-08-9	0.11	6.8	Di-n-octyl phthalate	117-84-0	0.017	28	Phthalic acid	100-21-0	0.055	28
bis-(2-Chloroethoxy) methane	111-91-1	0.036	7.2	Di-n-propylnitrosamine	621-64-7	0.40	14	Phthalic anhydride	85-44-9	0.055	25
bis-(2-Chloroethyl) ether	111-44-4	0.033	6.0	Diphenylamine	122-89-4	0.92	13	Promide	23950-58-5	0.093	1.5
bis-(Chloroisopropyl) ether	108-60-1	0.055	7.2	1,2-Diphenylhydrazine	122-66-7	0.087	NA	Propanenitrile (Ethyl cyanide)	107-12-0	0.24	360
bis-(Ethylhexyl) phthalate	117-81-7	0.28	26	Diphenylnitrosamine	66-30-6	0.92	13	Pyrene	129-00-0	0.067	8.2
Bromodichloromethane	75-27-4	0.35	15	1,4-Dioxane	123-91-1	NA	170	Pyridine	110-86-1	0.014	16
Bromomethane (methyl bromide)	74-83-9	0.11	15	p-Dimethylaminoazobenzene	60-11-7	0.13	NA	Salrole	94-59-7	0.081	22
4-Bromophenyl phenyl ether	101-55-3	0.055	15	Disulfoton	298-04-4	0.017	6.2	Silvex (2,4,5-TP)	93-72-1	0.72	7.9
n-Butyl alcohol	71-36-3	5.6	2.6	Endosulfan I	939-96-6	0.023	0.088	2,4,5-T	93-76-5	0.72	7.9
Butyl benzyl phthalate	85-88-7	0.017	28	Endosulfan II	33213-8-5	0.029	0.13	1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
2-sec-Butyl-4,6-dinitrophenol dinoseb	88-85-7	0.066	2.5	Endosulfan sulfate	1-31-07-8	0.029	0.13	Tetrachlorodibenzo-furans	NA	0.000063	0.001
Carbon disulfide	75-15-0	3.8	4.8 TCLP	Endrin	72-20-6	0.0028	0.13	Tetrachlorodibenzo-p-dioxins	NA	0.000063	0.001
Carbon tetrachloride	56-23-5	0.057	6.0	Endrin aldehyde	7421-93-4	0.025	0.13	1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
Chlordane (alpha & gamma isomers)	57-74-9	0.0033	0.26	Ethyl acetate	141-78-6	0.34	33	1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
p-Chloroaniline	106-47-8	0.46	18	Ethyl benzene	100-41-4	0.057	10	Tetrachloroethylene	127-18-4	0.056	6.0
Chlorobenzene	108-90-7	0.057	6.0	Ethyl ether	60-29-7	0.12	160	2,3,4,6-Tetrachlorophenol	58-96-2	0.030	7.4
Chlorobenzilate	510-15-6	0.10	NA	Ethyl methacrylate	97-83-2	0.14	160	Toluene	108-88-3	0.080	10
2-Chloro-1,3-butadiene	126-99-8	0.057	0.28	Ethylene oxide	75-21-8	0.12	NA	Toxaphene	8001-35-2	0.0095	2.6
Chlorodibromomethane	124-48-1	0.057	15	Famphur	52-85-7	0.017	15	Tribromomethane (bromoform)	75-25-2	0.63	15
Chloroethane	75-00-3	0.27	6.0	Fluoranthene	208-44-0	0.068	3.4	1,2,4-Trichlorobenzene	120-82-1	0.055	19
Chloroform	67-66-3	0.046	6.0	Fluorene	86-73-7	0.059	3.4	1,1,1-Trichloroethane	71-55-6	0.054	6.0
p-Chloro-m-cresol	59-50-7	0.018	14	Heptachlor	76-44-8	0.0012	0.066	1,1,2-Trichloroethane	79-00-5	0.054	6.0
2-Chloroethyl vinyl ether	110-75-8	0.062	NA	Heptachlor epoxide	1024-57-3	0.016	0.066	Trichloroethylene	79-01-6	0.054	6.0
Chloromethane (methyl chloride)	74-87-3	0.19	30	Hexachlorobenzene	118-74-1	0.055	10	Trichloromethoxyfluoromethane	75-69-4	0.020	30
2-Chloronaphthalene	91-67-7	0.055	5.8	Hexachlorobutadiene	87-68-3	0.055	5.6	2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2-Chlorophenol	95-57-8	0.044	5.7	Hexachlorodibenzo-furans	NA	0.000063	0.001	2,4,6-Trichlorophenol	88-06-2	0.035	7.4
3-Chloropropylene	107-05-1	0.036	30	Hexachlorodibenzo-p-dioxins	NA	0.000063	0.001	1,2,3-Trichloropropane	96-18-4	0.35	30
Chrysene	218-01-9	0.059	3.4	Hexachlorocyclopentadiene	77-47-4	0.057	2.4	1,1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.057	30
p-Cresol	108-44-5	0.77	5.6	Hexachloroethane	67-72-1	0.055	30	Vinyl chloride	75-01-4	0.27	6.0
m-Cresol	108-39-4	0.77	5.6	Hexachloropropylene	1888-71-7	0.035	30	Xylenes (total)	1330-20-7	0.32	30
o-Cresol	95-48-7	0.11	5.6	Indene (1,2,3-c,d)pyrene	193-39-5	0.0055	3.4	Total PCBs	1336-36-3	0.1	10
Cyclohexanone	108-94-1	0.36	0.75 TCLP	Iodomethane	74-88-4	0.19	65	Antimony	7440-36-0	1.9	0.07 TCLP
2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	0.72	10	Isobutyl alcohol	78-83-1	5.6	170	Arsenic	7440-38-2	1.4	5.0 TCLP
o,p'-DDD	53-19-0	0.023	0.087	Isodrin	465-73-6	0.021	0.066	Barium	7440-39-3	1.2	21 TCLP
p,p'-DDD	72-54-8	0.023	0.087	Isosafrole	120-58-1	0.081	2.8	Beryllium	7440-41-7	0.82	0.02 TCLP
o,p'-DDE	3424-82-6	0.031	0.087	Kepone	143-50-8	0.0011	0.13	Cadmium	7440-43-9	0.69	0.2 TCLP
p,p'-DDE	72-55-9	0.031	0.087	Methacrylonitrile	126-98-7	0.24	84	Chromium (total)	7440-47-3	2.77	0.85 TCLP
o,p'-DDT	789-02-6	0.0039	0.087	Methanol	67-58-1	5.6	0.75 TCLP	Cyanide (total)	57-12-5	1.2	590 ⁴
p,p'-DDT	50-29-3	0.0039	0.087	Methapyrene	91-80-5	0.081	1.5	Cyanide (amenable)	57-12-5	0.86	30 ⁴
Dibenzo(a,e)pyrene	192-65-4	0.061	NA	Methoxychlor	72-43-5	0.25	0.18	Fluoride	16964-48-6	35	NA
Dibenzo(a,h)anthracene	53-70-3	0.055	3.2	3-Methylchloanthrene	58-49-5	0.0055	15	Lead	7439-92-1	0.69	0.75 TCLP
tris-(2,3-Dibromopropyl) phosphate	128-72-7	0.11	0.10	4,4'-Methylene-bis-(2-chloroaniline)	101-14-4	0.50	30	Mercury - NWW from Retort	7439-97-6	0.15	0.20 TCLP
1,2-Dibromo-3-Chloropropane	55-12-8	0.11	15	Methylene chloride	75-09-2	0.039	30	Mercury - all others	7439-97-6	0.15	0.025 TCLP
1,2-Dibromoethane (ethylene dibromide)	106-93-4	0.028	15	Methyl ethyl ketone	78-93-3	0.28	36	Nickel	7440-02-0	3.58	13.6 TCLP
Dibromomethane	74-95-3	0.11	15	Methyl isobutyl ketone	108-10-1	0.14	33	Selenium ³	7782-49-2	0.82	5.7 TCLP
				Methyl methacrylate	80-82-6	0.14	150	Silver	7440-22-4	0.43	0.11 TCLP
				Methyl methanesulfonate	66-27-3	0.018	NA	Sulfide	8496-25-5	14.0	NA
				Methyl Parathion	298-00-0	0.014	4.3	Thallium	7440-28-0	1.4	0.20 TCLP
				Naphthalene	91-20-3	0.059	5.6	Vanadium ¹	7440-62-2	4.3	1.8 TCLP
				2-Naphthylamine	91-59-3	0.52	NA	Zinc ⁴	7440-66-6	2.51	4.3 TCLP



Rho Chem Corporation,
a wholly owned subsidiary of PHILIP SERVICES CORP.,
RCRA Land Disposal Restriction Notification Form EZ

Generator: SPACEX

EPA I.D. #: CAR000191536

Profile #: 390573-00

Manifest #: 000765127JJK

The wastes identified on this form are subject to the land disposal restrictions of 40 CFR Part 268. The wastes do not meet the treatment standards specified in 268.32. Pursuant to 40 CFR 268.7(a), the required information applicable to each waste is identified below (check all boxes that apply):

Treatability Group: ☐ Wastewater ☐ Nonwastewater
(Wastewaters contain less than 1% filterable solids and less than 1% Total Organic Carbon)

- ☒ **D001 Ignitable (except for High TOC) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems**
(Complete form UC, unless D001 is the only "D" code and the waste is to be combusted or recovered.)
- ☐ D001 Ignitable (except for High TOC) managed in CWA/ CWA-equivalent/Class I SDWA systems
- ☐ D001 High TOC Ignitable (greater than 10% total organic carbon)
- ☐ **D002 Corrosive managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems (Complete form UC)**
- ☐ D002 Corrosive managed in CWA/ CWA-equivalent/Class I SDWA systems
- ☐ D003 Reactive Sulfides based on 261.23(a)(5)
- ☐ D003 Reactive Cyanides based on 261.23(a)(5)
- ☐ **D003 Water Reactives based on 261.23(a)(2),(3) and (4) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems (Complete form UC)**
- ☐ D003 Water Reactives based on 261.23(a)(2),(3) and (4) managed in CWA/ CWA-equivalent/Class I SDWA systems
- ☐ **D003 Other Reactives based on 261.23(a)(1) (Complete form UC)**

If D004-43 boxes are checked, complete and attach Form UC to address underlying hazardous constituents (unless these wastes are to be managed in CWA/CWA-equivalent/Class I SDWA systems):

- | | | | |
|--|--|---|--|
| <input type="checkbox"/> D004 Arsenic | <input type="checkbox"/> D005 Barium | <input type="checkbox"/> D006 Cadmium | <input type="checkbox"/> D006 Cadmium-containing batteries |
| <input type="checkbox"/> D007 Chromium | <input type="checkbox"/> D008 Lead | <input type="checkbox"/> D008 Lead acid batteries | |
| <input type="checkbox"/> D009 High mercury inorganic (>260 mg/kg total), including incinerator residue and residues from RMERC | | | |
| <input type="checkbox"/> D009 High-mercury organic (>260 mg/kg total), not including incinerator residue | | | |
| <input type="checkbox"/> D009 Low-mercury (<260 mg/kg total) | | <input type="checkbox"/> D009 All D009 wastewaters | |
| <input type="checkbox"/> D010 Selenium | <input type="checkbox"/> D011 Silver | | |
| <input type="checkbox"/> D012 Endrin | <input type="checkbox"/> D023 o-Cresol | <input type="checkbox"/> D033 Hexachlorobutadiene | |
| <input type="checkbox"/> D013 Lindane | <input type="checkbox"/> D024 m-Cresol | <input type="checkbox"/> D034 Hexachloroethane | |
| <input type="checkbox"/> D014 Methoxychlor | <input type="checkbox"/> D025 p-Cresol | <input type="checkbox"/> D035 Methyl ethyl ketone | |
| <input type="checkbox"/> D015 Toxaphene | <input type="checkbox"/> D026 Cresols (Total) | <input type="checkbox"/> D036 Nitrobenzene | |
| <input type="checkbox"/> D016 2,4-D | <input type="checkbox"/> D027 p-Dichlorobenzene | <input type="checkbox"/> D037 Pentachlorophenol | |
| <input type="checkbox"/> D017 2,4,5-TP (Silvex) | <input type="checkbox"/> D028 1,2-Dichloroethane | <input type="checkbox"/> D038 Pyridine | |
| <input type="checkbox"/> D018 Benzene | <input type="checkbox"/> D029 1,1-Dichloroethylene | <input type="checkbox"/> D039 Tetrachloroethylene | |
| <input type="checkbox"/> D019 Carbon tetrachloride | <input type="checkbox"/> D030 2,4-Dinitrotoluene | <input type="checkbox"/> D040 Trichloroethylene | |
| <input type="checkbox"/> D020 Chlordane | <input type="checkbox"/> D031 Heptachlor | <input type="checkbox"/> D041 2,4,5-Trichlorophenol | |
| <input type="checkbox"/> D021 Chlorobenzene | <input type="checkbox"/> D032 Hexachlorobenzene | <input type="checkbox"/> D042 2,4,6-Trichlorophenol | |
| <input type="checkbox"/> D022 Chloroform | | <input type="checkbox"/> D043 Vinyl chloride | |

Note: If any bolded entries are checked, form UC must be completed to address underlying hazardous constituents, unless the material is treated in a Clean Water Act (CWA) treatment process or unless otherwise noted above.

In addition, the following wastes are included in this shipment:

- ☐ F001-F005 spent solvents. (If this box is checked, complete the F001-F005 section on the back of this form. Check the hazardous waste number(s) that applies, and identify the constituents likely to be present in the waste.)

If this shipment carries additional waste codes that are not addressed above, identify them here:

EPA Waste Code	Subcategory (if applicable)	EPA Waste Code	Subcategory (if applicable)
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

F001-F005 Spent Solvents

Check the box(es) that applies; identify the individual constituents likely to be present.

Hazardous waste description

Regulated hazardous constituents

<input type="checkbox"/> F001 Spent halogenated solvents used in degreasing	Carbon tetrachloride Tetrachloroethylene Trichloroethylene Trichloromonofluoromethane	Methylene chloride 1,1,1-Trichloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane
<input type="checkbox"/> F002 Spent halogenated solvents	Chlorobenzene Methylene chloride 1,1,1-Trichloroethane Trichloroethylene Trichloromonofluoromethane	<i>o</i> -Dichlorobenzene Tetrachloroethylene 1,1,2-Trichloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane
<input type="checkbox"/> F003 Spent non-halogenated solvents	Acetone Cyclohexanone* Ethyl benzene Methanol* Xylenes (total)	<i>n</i> -Butyl alcohol Ethyl acetate Ethyl ether Methyl isobutyl ketone
<input type="checkbox"/> F004 Spent non-halogenated solvents	<i>m</i> -Cresol <i>p</i> -Cresol Nitrobenzene	<i>o</i> -Cresol Cresol-mixed isomers (cresylic acid)
<input type="checkbox"/> F005 Spent non-halogenated solvents	Benzene 2-Ethoxyethanol Methyl ethyl ketone Pyridine	Carbon disulfide* Isobutyl alcohol 2-Nitropropane Toluene

*The treatment standards for carbon disulfide, cyclohexanone, and methanol nonwastewaters are based on the TCLP and apply to spent solvent nonwastewaters containing only one, two, or all three of these constituents. The treatment standards for these three constituents do not apply when any of the other F001-F005 constituents are present in the waste.

Hazardous Debris

- ☐ This shipment contains hazardous debris that will be treated to comply with the alternative treatment standards of 268.45 (e.g., macroencapsulation or a blasting).

(The definitions of "debris" and "hazardous debris" are in 40 CFR 268.2. Per 268.45, hazardous debris must be treated for each "contaminant subject to treatment." To determine these, look up the waste code in 268.40 and list the regulated hazardous constituents for each code.)

The contaminants subject to treatment for this debris are identified below:

EPA Waste Code	Subcategory	Contaminants subject to treatment

Rho Chem Corporation,
a wholly owned subsidiary of PHILIP SERVICES CORP.,
RCRA Land Disposal Restriction Notification Form UC

Generator: SPACE X U.S. EPA I.D. #: CAR000191536

Profile #: 390573-00 Manifest #: 000765127JJJ

In accordance with 40 CFR 268.7(a), the underlying hazardous constituents must be addressed in this waste. Per 268.2(i), "underlying hazardous constituent means any constituent listed in 268.48, Table UTS—Universal Treatment Standard which can reasonably be expected to be present at the point of generation of hazardous waste, at a concentration above the constituent-specific UTS treatment standard. Refer to Form-EZ (attached) for the waste code(s), treatability and subcategory applicable to this waste.

In order to address underlying hazardous constituents in characteristic wastes, please check the appropriate box:

- ☒ I have reviewed the UTS list of 268.48, and per 268.7(a), I have determined that there are no underlying hazardous constituents reasonably expected to be present in this waste.
- ☐ I have reviewed the UTS list of 268.48, and per 268.7(a), I have determined that underlying hazardous constituents are present in this waste. The underlying hazardous constituents are identified as follows:

The determination of underlying hazardous constituents was based on:

- ☒ Generator's knowledge of the waste
- ☐ Analysis

I certify that I personally have examined and am familiar with the waste through analysis and testing, or through knowledge of the waste to support this certification. I certify that as an authorized representative of the generator named above, all the information submitted in this notification is true and correct to the best of my knowledge.

MARK DROV
Printed Name

[Signature]
Signature

01/21/09
Date

List of Underlying Hazardous Constituents 40 CFR 268.48

Circle or otherwise identify the underlying hazardous constituents present in the waste:

<u>Organic Constituent</u>	<u>Organic Constituent</u>	<u>Organic Constituent</u>	<u>Organic Constituent</u>
A2213	2-Chlorophenol	Ethyl acetate	Oxamyl
Acenaphthylene	3-Chloropropylene	Ethyl benzene	Parathion
Acenaphthene	Chrysene	Ethyl cyanide/Propanenitrile	Total PCBs(sum of all isomers, or all
Aroclors)			
Acetone	<i>o</i> -Cresol	Ethyl ether	Pebulate
Acetonitrile	<i>m</i> -Cresol	bis(2-Ethylhexyl)phthalate	Pentachlorobenzene
Acetophenone	<i>p</i> -Cresol	Ethyl methacrylate	PeCDDs(All Pentachlorodibenzo- <i>p</i> -dioxi
2-Acetylaminofluorene	<i>m</i> -Cumenyl methylcarbamate	Ethylene oxide	PeCDFs(All Pentachlorodibenzofurans)
Acrolein	Cyclohexanone	Famphur	Pentachloroethane
Acrylamide	<i>o,p'</i> -DDD	Fluoranthene	Pentachloronitrobenzene
Acrylonitrile	<i>p,p'</i> -DDD	Fluorene	Pentachlorophenol
Aldicarb sulfone	<i>o,p'</i> -DDE	Formetanate hydrochloride	Phenacetin
Aldrin	<i>p,p'</i> -DDE	Formparanate	Phenanthrene
4-Aminobiphenyl	<i>o,p'</i> -DDT	Heptachlor	Phenol
Aniline	<i>p,p'</i> -DDT	Heptachlor epoxide	<i>o</i> -Phenylenediamine
Anthracene	Dibenz(a,h)anthracene	Hexachlorobenzene	Phorate
Aramite	Dibenz(a,e)pyrene	Hexachlorobutadiene	Phthalic acid
alpha-BHC	1,2-Dibromo-3-chloropropane	Hexachlorocyclopentadiene	Phthalic anhydride
beta-BHC	1,2-Dibromoethane/Ethylene dibromide	HxCDDs(All Hexachlorodibenzo- <i>p</i> -dioxins)	Physostigmine
delta-BHC	Dibromomethane	HxCDFs(All Hexachlorodibenzofurans)	Physostigmine salicylate
gamma-BHC	<i>m</i> -Dichlorobenzene	Hexachloroethane	Promecarb
Barban	<i>o</i> -Dichlorobenzene	Hexachloropropylene	Pronamide
Bendiocarb	<i>p</i> -Dichlorobenzene	Indeno(1,2,3-c,d)pyrene	Propham
Bendiocarb phenol	Dichlorodifluoromethane	Iodomethane	Propoxur
Benomyl	1,1-Dichloroethane	Isobutyl alcohol	Prosulfocarb
Benzene	1,2-Dichloroethane	Isodrin	Pyrene
Benz(a)anthracene	1,1-Dichloroethylene	Isolan	Pyridine
Benzal chloride	<i>trans</i> -1,2-Dichloroethylene	Isosafrole	Safrole
Benzo(b)fluoranthene	2,4-Dichlorophenol	Kepone	Silvex/2,4,5-TP
Benzo(k)fluoranthene	2,6-Dichlorophenol	Methacrylonitrile	1,2,4,5-Tetrachlorobenzene
Benzo(g,h,i)perylene	2,4-Dichlorophenoxyacetic acid/2,4-D	Methanol	TCDDs(All Tetrachlorodibenzo- <i>p</i> -dioxin
Benzo(a)pyrene	1,2-Dichloropropane	Methapyrene	TCDFs(All Tetrachlorodibenzofurans)
Bromodichloromethane	<i>cis</i> -1,3-Dichloropropylene	Methiocarb	1,1,1,2-Tetrachloroethane
Bromomethane/Methyl bromide	<i>trans</i> -1,3-Dichloropropylene	Methomyl	1,1,2,2-Tetrachloroethane
4-Bromophenyl phenyl ether	Dieldrin	Methoxychlor	Tetrachloroethylene
<i>n</i> -Butyl alcohol	Diethylene glycol, dicarbamate	3-Methylcholanthrene	2,3,4,6-Tetrachlorophenol
Butylate	Diethyl phthalate	4,4-Methylene-bis(2-chloroaniline)	Thiodicarb
Butyl benzyl phthalate	<i>p</i> -Dimethylaminoazobenzene	Methylene chloride	Thiophanate-methyl
2-sec-Butyl-4,6-dinitrophenol/Dinoseb	2,4-Dimethyl phenol	Methyl ethyl ketone	Tirpate
Carbaryl	Dimethyl phthalate	Methyl isobutyl ketone	Toluene
Carbenzadim	Dimetilan	Methyl methacrylate	Toxaphene
Carbofuran	Di- <i>n</i> -butyl phthalate	Methyl methansulfonate	Triallate
Carbofuran phenol	1,4-Dinitrobenzene	Methyl parathion	Tribromomethane/Bromoform
Carbon disulfide	4,6-Dinitro- <i>o</i> -cresol	Metolcarb	2,4,6-Tribromophenol
Carbon tetrachloride	2,4-Dinitrophenol	Mexacarbate	1,2,4-Trichlorobenzene
Carbosulfan	2,4-Dinitrotoluene	Molinate	1,1,1-Trichloroethane
Chlordane (alpha and gamma isomers)	2,6-Dinitrotoluene	Naphthalene	1,1,2-Trichloroethane
<i>p</i> -Chloroaniline	Di- <i>n</i> -octyl phthalate	2-Naphthylamine	Trichloroethylene
Chlorobenzene	Di- <i>n</i> -propylnitrosamine	<i>o</i> -Nitroaniline	Trichloromonofluoromethane
Chlorobenzilate	1,4-Dioxane	<i>p</i> -Nitroaniline	2,4,5-Trichlorophenol
2-Chloro-1,3-butadiene	Diphenylamine	Nitrobenzene	2,4,6-Trichlorophenol
Chlorodibromomethane	Diphenylnitrosamine	5-Nitro- <i>o</i> -toluidine	2,4,5-Trichlorophenoxyacetic acid/2,4,5-
Chloroethane	1,2-Diphenylhydrazine	<i>o</i> -Nitrophenol	1,2,3-Trichloropropane
bis(2-Chloroethoxy)methane	Disulfoton	<i>p</i> -Nitrophenol	1,1,2-Trichloro-1,2,2-trifluoroethane
bis(2-Chloroethyl)ether	Dithiocarbamates (total)	N-Nitrosodiethylamine	Triethylamine
Chloroform	Endosulfan I	N-Nitrosodimethylamine	tris-(2,3-Dibromopropyl)phosphate
bis(2-Chloroisopropyl)ether	Endosulfan II	N-Nitroso-di- <i>n</i> -butylamine	Vernolate
<i>p</i> -Chloro- <i>m</i> -cresol	Endosulfan sulfate	N-Nitrosomethylethylamine	Vinyl chloride
2-Chloroethyl vinyl ether	Endrin	N-Nitrosomorpholine	Xylenes-mixed isomers
Chloromethane/Methyl chloride	Endrin aldehyde	N-Nitrosopiperidine	(sum of <i>o</i> -, <i>m</i> -, and <i>p</i> -xylene
concentrations)			
2-Chloronaphthalene	EPTC	N-Nitrosopyrrolidine	
<u>Inorganic Constituent</u>	<u>Inorganic Constituent</u>	<u>Inorganic Constituent</u>	<u>Inorganic Constituent</u>
Antimony	Cadmium	Lead	Silver
Arsenic	Chromium (Total)	Mercury-Nonwastewater from Retort	Sulfides
Barium	Cyanides (Total)	Mercury-All Others	Thallium
Beryllium	Cyanides (Amenable)	Nickel	

LAND DISPOSAL RESTRICTION NOTIFICATION FORM

Pursuant to CCR Title 22, Section 66268.7(40 CFR 268.7(a), I hereby notify that this waste shipment contains one or more of the following wastes restricted under the land disposal restrictions for which applicable treatment standards are set forth in CCR Title 22, Section 66268.40 (40 CFR 268.40)

Manifest Num. 000765195 JJK Generator Name : SPACEX EPA# CAR000191536						
RCRA HAZARDOUS WASTE INFORMATION						
U.S.F. PROFILE NUMBER/ MANIFEST LINE ITEM NUMBER	List all D, F, K, U & P Codes	Subcategory (IF ANY)	WASTEWATER*/ NONWASTEWATER WW NWW		California List ** Per CCR Title 22, Section 66268.32	Hazardous Debris Subject To CCR Title 22, Sec 66268.45
1) 35072847				X	<input type="checkbox"/> For: _____	<input type="checkbox"/>
				X	<input type="checkbox"/> For: _____	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>

ADDITIONAL INFORMATION FOR D001, D002, D012-43, F001-5 & F039 WASTE STREAMS: (check one)

☒ There are no underlying hazardous constituents (UHCs) present

☐ There are underlying hazardous constituents (UHCs) present which do not meet treatment standards per CCR Title 22, Section 66268.48
(Use the attached UTS Table and check the appropriate constituent(s) present in the waste stream)

DETERMINATION BASED UPON : (check one)

☒ Knowledge of the process generating the waste and the raw materials used and the reaction products

☐ Results from analytical testing Analytical results attached ☐ YES ☐ NO

TERM DEFINITIONS:

* **WASTEWATER** = per CCR Title 22, Section 66260.10, WASTE THAT CONTAINS LESS THAN 1% BY WEIGHT TOTAL TOXIC ORGANICS (TOCs) AND 1% BY WEIGHT TOTAL SUSPENDED SOLIDS (TSS).

* **CALIFORNIA LIST** = THE FOLLOWING HAZARDOUS WASTES ARE PROHIBITED FROM LAND DISPOSAL: per CCR Title 22, Section 66268.32


- Liquid hazardous waste with a pH less than or equal to 2.0
- Liquid hazardous waste containing PCB's at concentration of greater than or equal to 50 ppm
- Liquid hazardous waste, including free liquids associated with any solids/sludge, containing free cyanide at concentrations greater than or equal to 1,000 mg/L
- Liquid hazardous waste, including free liquids associated with any solids/sludge, containing metals at concentrations greater than or equal to the following:

ARSENIC	500 mg/L	MERCURY	20 mg/L
CADMIUM	100 mg/L	NICKEL	134 mg/L
CHROMIUM	500 mg/L	SELENIUM	100 mg/L
LEAD	500 mg/L	THALLIUM	130 mg/L

- Liquid hazardous waste, that contains HOC's in total concentration greater than or equal to 1,000 mg/L
- Non-liquid RCRA hazardous waste containing HOC's in total concentration greater than or equal to 1,000 mg/L

CERTIFICATION

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification. I believe that the information I have submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment

SPACEX **M. DROG**  03/11/09

COMPANY NAME AUTHORIZED SIGNATURE DATE

LAND DISPOSAL RESTRICTION NOTIFICATION FORM

Pursuant to CCR Title 22, Section 66268.7(40 CFR 268.7(a), I hereby notify that this waste shipment contains one or more of the following wastes restricted under the land disposal restrictions for which applicable treatment standards are set forth in CCR Title 22, Section 66268.40 (40 CFR 268.40)

Manifest Num. 000765216 JJK Generator Name : SPACEX EPA# CAR000191536						
RCRA HAZARDOUS WASTE INFORMATION						
U.S.F. PROFILE NUMBER/ MANIFEST LINE ITEM NUMBER	List all D, F, K, U & P Codes	Subcategory (IF ANY)	WASTEWATER*/ NONWASTEWATER WW NWW		California List ** Per CCR Title 22, Section 66268.32	Hazardous Debris Subject To CCR Title 22, Sec 66268.45
1) 35072847B				X	<input type="checkbox"/> For: _____	<input type="checkbox"/>
					<input type="checkbox"/> For: _____	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>

ADDITIONAL INFORMATION FOR D001, D002, D012-43, F001-5 & F039 WASTE STREAMS: (check one)

☒ There are no underlying hazardous constituents (UHCs) present

☐ There are underlying hazardous constituents (UHCs) present which do not meet treatment standards per CCR Title 22, Section 66268.48
(Use the attached UTS Table and check the appropriate constituent(s) present in the waste stream)

DETERMINATION BASED UPON : (check one)

☒ Knowledge of the process generating the waste and the raw materials used and the reaction products

☐ Results from analytical testing Analytical results attached ☐ YES ☐ NO

TERM DEFINITIONS:

* **WASTEWATER** = per CCR Title 22, Section 66260.10, WASTE THAT CONTAINS LESS THAN 1% BY WEIGHT TOTAL TOXIC ORGANICS (TOCs) AND 1% BY WEIGHT TOTAL SUSPENDED SOLIDS (TSS).

* **CALIFORNIA LIST**= THE FOLLOWING HAZARDOUS WASTES ARE PROHIBITED FROM LAND DISPOSAL: per CCR Title 22, Section 66268.32


- Liquid hazardous waste with a pH less than or equal to 2.0
- Liquid hazardous waste containing PCB's at concentration of greater than or equal to 50 ppm
- Liquid hazardous waste, including free liquids associated with any solids/sludge, containing free cyanide at concentrations greater than or equal to 1,000 mg/L
- Liquid hazardous waste, including free liquids associated with any solids/sludge, containing metals at concentrations greater than or equal to the following:

ARSENIC	500 mg/L	MERCURY	20 mg/L
CADMIUM	100 mg/L	NICKEL	134 mg/L
CHROMIUM	500 mg/L	SELENIUM	100 mg/L
LEAD	500 mg/L	THALLIUM	130 mg/L

- Liquid hazardous waste, that contains HOC's in total concentration greater than or equal to 1,000 mg/L
- Non-liquid RCRA hazardous waste containing HOC's in total concentration greater than or equal to 1,000 mg/L

CERTIFICATION

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification. I believe that the information I have submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment

SPACE X  04/02/09

COMPANY NAME AUTHORIZED SIGNATURE DATE



Rho Chem Corporation,
a wholly owned subsidiary of PHILIP SERVICES CORP.,
RCRA Land Disposal Restriction Notification Form EZ

Generator: SPACE X

EPA I.D. #: CAR000191536

Profile #: 390575-00

Manifest #: 000765220JJK

The wastes identified on this form are subject to the land disposal restrictions of 40 CFR Part 268. The wastes do not meet the treatment standards specific 268. Subpart D or do not meet the applicable prohibition levels specified in 268.32. Pursuant to 40 CFR 268.7(a), the required information applicable to ea is identified below (check all boxes that apply):

Treatability Group: ☐ Wastewater ☐ Nonwastewater
(Wastewaters contain less than 1% filterable solids and less than 1% Total Organic Carbon)

- ☒ **D001 Ignitable (except for High TOC) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems**
(Complete form UC, unless D001 is the only "D" code and the waste is to be combusted or recovered.)
- ☐ D001 Ignitable (except for High TOC) managed in CWA/ CWA-equivalent/Class I SDWA systems
- ☐ D001 High TOC Ignitable (greater than 10% total organic carbon)
- ☐ **D002 Corrosive managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems (Complete form UC)**
- ☐ D002 Corrosive managed in CWA/ CWA-equivalent/Class I SDWA systems
- ☐ D003 Reactive Sulfides based on 261.23(a)(5)
- ☐ D003 Reactive Cyanides based on 261.23(a)(5)
- ☐ **D003 Water Reactives based on 261.23(a)(2),(3) and (4) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems (Complete form UC)**
- ☐ D003 Water Reactives based on 261.23(a)(2),(3) and (4) managed in CWA/ CWA-equivalent/Class I SDWA systems
- ☐ **D003 Other Reactives based on 261.23(a)(1) (Complete form UC)**

If D004-43 boxes are checked, complete and attach Form UC to address underlying hazardous constituents (unless these wastes are to be managed in CWA/CWA-equivalent/ SDWA systems):

- | | | | |
|--|---|--|--|
| <input type="checkbox"/> D004 Arsenic | <input type="checkbox"/> D005 Barium | <input type="checkbox"/> D006 Cadmium | <input type="checkbox"/> D006 Cadmium-containing batteries |
| <input type="checkbox"/> D007 Chromium | <input type="checkbox"/> D008 Lead | <input type="checkbox"/> D008 Lead acid batteries | |
| <input type="checkbox"/> D009 High mercury inorganic (>260 mg/kg total), including incinerator residue and residues from RMERC | | | |
| <input type="checkbox"/> D009 High-mercury organic (>260 mg/kg total), not including incinerator residue | | | |
| <input type="checkbox"/> D009 Low-mercury (<260 mg/kg total) | <input type="checkbox"/> D009 All D009 wastewaters | | |
| <input type="checkbox"/> D010 Selenium | <input type="checkbox"/> D011 Silver | | |
| <input type="checkbox"/> D012 Endrin | <input type="checkbox"/> D023 o-Cresol | <input type="checkbox"/> D033 Hexachlorobutadiene | |
| <input type="checkbox"/> D013 Lindane | <input type="checkbox"/> D024 m-Cresol | <input type="checkbox"/> D034 Hexachloroethane | |
| <input type="checkbox"/> D014 Methoxychlor | <input type="checkbox"/> D025 p-Cresol | <input type="checkbox"/> D035 Methyl ethyl ketone | |
| <input type="checkbox"/> D015 Toxaphene | <input type="checkbox"/> D026 Cresols (Total) | <input type="checkbox"/> D036 Nitrobenzene | |
| <input type="checkbox"/> D016 2,4-D | <input type="checkbox"/> D027 p-Dichlorobenzene | <input type="checkbox"/> D037 Pentachlorophenol | |
| <input type="checkbox"/> D017 2,4,5-TP (Silvex) | <input type="checkbox"/> D028 1,2-Dichloroethane | <input type="checkbox"/> D038 Pyridine | |
| <input type="checkbox"/> D018 Benzene | <input type="checkbox"/> D029 1,1-Dichloroethylene | <input type="checkbox"/> D039 Tetrachloroethylene | |
| <input type="checkbox"/> D019 Carbon tetrachloride | <input type="checkbox"/> D030 2,4-Dinitrotoluene | <input type="checkbox"/> D040 Trichloroethylene | |
| <input type="checkbox"/> D020 Chlordane | <input type="checkbox"/> D031 Heptachlor | <input type="checkbox"/> D041 2,4,5-Trichlorophenol | |
| <input type="checkbox"/> D021 Chlorobenzene | <input type="checkbox"/> D032 Hexachlorobenzene | <input type="checkbox"/> D042 2,4,6-Trichlorophenol | |
| <input type="checkbox"/> D022 Chloroform | | <input type="checkbox"/> D043 Vinyl chloride | |

Note: If any bolded entries are checked, form UC must be completed to address underlying hazardous constituents, unless the material is treated in a Clean Water Act (CWA) treatment process or unless otherwise noted above.

In addition, the following wastes are included in this shipment:

- ☐ F001-F005 spent solvents. (If this box is checked, complete the F001-F005 section on the back of this form. Check the hazardous waste number(s) that applies, and identify the constituents likely to be present in the waste.)

If this shipment carries additional waste codes that are not addressed above, identify them here:

<u>EPA Waste Code</u>	<u>Subcategory (if applicable)</u>	<u>EPA Waste Code</u>	<u>Subcategory (if applicable)</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

F001-F005 Spent Solvents

Check the box(es) that applies; identify the individual constituents likely to be present.

Hazardous waste descriptionRegulated hazardous constituents

<input type="checkbox"/> F001 Spent halogenated solvents used in degreasing	Carbon tetrachloride Tetrachloroethylene Trichloroethylene Trichloromonofluoromethane	Methylene chloride 1,1,1-Trichloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane
<input type="checkbox"/> F002 Spent halogenated solvents	Chlorobenzene Methylene chloride 1,1,1-Trichloroethane Trichloroethylene Trichloromonofluoromethane	<i>o</i> -Dichlorobenzene Tetrachloroethylene 1,1,2-Trichloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane
<input type="checkbox"/> F003 Spent non-halogenated solvents	Acetone Cyclohexanone* Ethyl benzene Methanol* Xylenes (total)	<i>n</i> -Butyl alcohol Ethyl acetate Ethyl ether Methyl isobutyl ketone
<input type="checkbox"/> F004 Spent non-halogenated solvents	<i>m</i> -Cresol <i>p</i> -Cresol Nitrobenzene	<i>o</i> -Cresol Cresol-mixed isomers (cresylic acid)
<input type="checkbox"/> F005 Spent non-halogenated solvents	Benzene 2-Ethoxyethanol Methyl ethyl ketone Pyridine	Carbon disulfide* Isobutyl alcohol 2-Nitropropane Toluene

*The treatment standards for carbon disulfide, cyclohexanone, and methanol nonwastewaters are based on the TCLP and apply to spent solvent nonwastewaters containing only one, two, or all three of these constituents. The treatment standards for these three constituents do not apply when any of the other F001-F005 constituents are present in the waste.

Hazardous Debris

- ☐ This shipment contains hazardous debris that will be treated to comply with the alternative treatment standards of 268.45 (e.g., macroencapsulation or a blasting).

(The definitions of "debris" and "hazardous debris" are in 40 CFR 268.2. Per 268.45, hazardous debris must be treated for each "contaminant" subject to treatment." To determine these, look up the waste code in 268.40 and list the regulated hazardous constituents for each code.)

The contaminants subject to treatment for this debris are identified below:

<u>EPA Waste Code</u>	<u>Subcategory</u>	<u>Contaminants subject to treatment</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

**Rho Chem Corporation,
a wholly owned subsidiary of PHILIP SERVICES CORP.,
RCRA Land Disposal Restriction Notification Form UC**

Generator: SPACEX U.S. EPA I.D. #: CAR000191536
Profile #: 390575-00 Manifest #: 000765220JJK

In accordance with 40 CFR 268.7(a), the underlying hazardous constituents must be addressed in this waste. Per 268.2(i), "underlying hazardous constituent means any constituent listed in 268.48, Table UTS—Universal Treatment Standard which can reasonably be expected to be present at the point of generation of hazardous waste, at a concentration above the constituent-specific UTS treatment standard. Refer to Form-EZ (attached) for the waste code(s), treatability and subcategory applicable to this waste.

In order to address underlying hazardous constituents in characteristic wastes, please check the appropriate box:

- ☒ I have reviewed the UTS list of 268.48, and per 268.7(a), I have determined that there are no underlying hazardous constituents reasonably expected to be present in this waste.
- ☐ I have reviewed the UTS list of 268.48, and per 268.7(a), I have determined that underlying hazardous constituents are present in this waste. The underlying hazardous constituents are identified as follows:

The determination of underlying hazardous constituents was based on:

- ☒ Generator's knowledge of the waste
- ☐ Analysis

I certify that I personally have examined and am familiar with the waste through analysis and testing, or through knowledge of the waste to support this certification. I certify that as an authorized representative of the generator named above, all the information submitted in this notification is true and correct to the best of my knowledge.

MARK DROP
Printed Name


Signature

04/02/09
Date

List of Underlying Hazardous Constituents 40 CFR 268.48

Circle or otherwise identify the underlying hazardous constituents present in the waste:

<u>Organic Constituent</u>	<u>Organic Constituent</u>	<u>Organic Constituent</u>	<u>Organic Constituent</u>
A2213	2-Chlorophenol	Ethyl acetate	Oxamyl
Acenaphthylene	3-Chloropropylene	Ethyl benzene	Parathion
Acenaphthene	Chrysene	Ethyl cyanide/Propanenitrile	Total PCBs(sum of all isomers, or all
Aroclors)			
Acetone	<i>o</i> -Cresol	Ethyl ether	Pebulate
Acetonitrile	<i>m</i> -Cresol	bis(2-Ethylhexyl)phthalate	Pentachlorobenzene
Acetophenone	<i>p</i> -Cresol	Ethyl methacrylate	PeCDDs(All Pentachlorodibenzo- <i>p</i> -dioxi
2-Acetylaminofluorene	<i>m</i> -Cumenyl methylcarbamate	Ethylene oxide	PeCDFs(All Pentachlorodibenzofurans)
Acrolein	Cyclohexanone	Famphur	Pentachloroethane
Acrylamide	<i>o,p'</i> -DDD	Fluoranthene	Pentachloronitrobenzene
Acrylonitrile	<i>p,p'</i> -DDD	Fluorene	Pentachlorophenol
Aldicarb sulfone	<i>o,p'</i> -DDE	Formetanate hydrochloride	Phenacetin
Aldrin	<i>p,p'</i> -DDE	Formparanate	Phenanthrene
4-Aminobiphenyl	<i>o,p'</i> -DDT	Heptachlor	Phenol
Aniline	<i>p,p'</i> -DDT	Heptachlor epoxide	<i>o</i> -Phenylenediamine
Anthracene	Dibenz(a,h)anthracene	Hexachlorobenzene	Phorate
Aramite	Dibenz(a,e)pyrene	Hexachlorobutadiene	Phthalic acid
alpha-BHC	1,2-Dibromo-3-chloropropane	Hexachlorocyclopentadiene	Phthalic anhydride
beta-BHC	1,2-Dibromoethane/Ethylene dibromide	HxCDDs(All Hexachlorodibenzo- <i>p</i> -dioxins)	Physostigmine
delta-BHC	Dibromomethane	HxCDFs(All Hexachlorodibenzofurans)	Physostigmine salicylate
gamma-BHC	<i>m</i> -Dichlorobenzene	Hexachloroethane	Promecarb
Barban	<i>o</i> -Dichlorobenzene	Hexachloropropylene	Pronamide
Bendiocarb	<i>p</i> -Dichlorobenzene	Indeno(1,2,3-c,d)pyrene	Propbam
Bendiocarb phenol	Dichlorodifluoromethane	Iodomethane	Propoxur
Benomyl	1,1-Dichloroethane	Isobutyl alcohol	Prosulfocarb
Benzene	1,2-Dichloroethane	Isodrin	Pyrene
Benz(a)anthracene	1,1-Dichloroethylene	Isolan	Pyridine
Benzal chloride	<i>trans</i> -1,2-Dichloroethylene	Isosafrole	Safrole
Benzo(b)fluoranthene	2,4-Dichlorophenol	Kepone	Silvex/2,4,5-TP
Benzo(k)fluoranthene	2,6-Dichlorophenol	Methacrylonitrile	1,2,4,5-Tetrachlorobenzene
Benzo(g,h,i)perylene	2,4-Dichlorophenoxyacetic acid/2,4-D	Methanol	TCDDs(All Tetrachlorodibenzo- <i>p</i> -dioxin:
Benzo(a)pyrene	1,2-Dichloropropane	Methapyrene	TCDFs(All Tetrachlorodibenzofurans)
Bromodichloromethane	<i>cis</i> -1,3-Dichloropropylene	Methiocarb	1,1,1,2-Tetrachloroethane
Bromomethane/Methyl bromide	<i>trans</i> -1,3-Dichloropropylene	Methomyl	1,1,2,2-Tetrachloroethane
4-Bromophenyl phenyl ether	Dieldrin	Methoxychlor	Tetrachloroethylene
<i>n</i> -Butyl alcohol	Diethylene glycol, dicarbamate	3-Methylcholanthrene	2,3,4,6-Tetrachlorophenol
Butylate	Diethyl phthalate	4,4-Methylene-bis(2-chloroaniline)	Thiodicarb
Butyl benzyl phthalate	<i>p</i> -Dimethylaminoazobenzene	Methylene chloride	Thiophanate-methyl
2-sec-Butyl-4,6-dinitrophenol/Dinoseb	2,4-Dimethyl phenol	Methyl ethyl ketone	Tirpate
Carbaryl	Dimethyl phthalate	Methyl isobutyl ketone	Toluene
Carbenzadim	Dimetilan	Methyl methacrylate	Toxaphene
Carbofuran	Di- <i>n</i> -butyl phthalate	Methyl methansulfonate	Triallate
Carbofuran phenol	1,4-Dinitrobenzene	Methyl parathion	Tribromomethane/Bromoform
Carbon disulfide	4,6-Dinitro- <i>o</i> -cresol	Metolcarb	2,4,6-Tribromophenol
Carbon tetrachloride	2,4-Dinitrophenol	Mexacarbate	1,2,4-Trichlorobenzene
Carbosulfan	2,4-Dinitrotoluene	Molinate	1,1,1-Trichloroethane
Chlordane (alpha and gamma isomers)	2,6-Dinitrotoluene	Naphthalene	1,1,2-Trichloroethane
<i>p</i> -Chloroaniline	Di- <i>n</i> -octyl phthalate	2-Naphthylamine	Trichloroethylene
Chlorobenzene	Di- <i>n</i> -propylnitrosamine	<i>o</i> -Nitroaniline	Trichloromono fluoromethane
Chlorobenzilate	1,4-Dioxane	<i>p</i> -Nitroaniline	2,4,5-Trichlorophenol
2-Chloro-1,3-butadiene	Diphenylamine	Nitrobenzene	2,4,6-Trichlorophenol
Chlorodibromomethane	Diphenylnitrosamine	5-Nitro- <i>o</i> -toluidine	2,4,5-Trichlorophenoxyacetic acid/2,4,5-
Chloroethane	1,2-Diphenylhydrazine	<i>o</i> -Nitrophenol	1,2,3-Trichloropropane
bis(2-Chloroethoxy)methane	Disulfoton	<i>p</i> -Nitrophenol	1,1,2-Trichloro-1,2,2-trifluoroethane
bis(2-Chloroethyl)ether	Dithiocarbamates (total)	N-Nitrosodiethylamine	Triethylamine
Chloroform	Endosulfan I	N-Nitrosodimethylamine	tris-(2,3-Dibromopropyl)phosphate
bis(2-Chloroisopropyl)ether	Endosulfan II	N-Nitroso-di- <i>n</i> -butylamine	Vernolate
<i>p</i> -Chloro- <i>m</i> -cresol	Endosulfan sulfate	N-Nitrosomethylethylamine	Vinyl chloride
2-Chloroethyl vinyl ether	Endrin	N-Nitrosomorpholine	Xylenes-mixed isomers
Chloromethane/Methyl chloride concentrations)	Endrin aldehyde	N-Nitrosopiperidine	(sum of <i>o</i> -, <i>m</i> -, and <i>p</i> -xylene
2-Chloronaphthalene	EPTC	N-Nitrosopyrrolidine	
<u>Inorganic Constituent</u>	<u>Inorganic Constituent</u>	<u>Inorganic Constituent</u>	<u>Inorganic Constituent</u>
Antimony	Cadmium	Lead	Silver
Arsenic	Chromium (Total)	Mercury-Nonwastewater from Retort	Sulfides
Barium	Cyanides (Total)	Mercury-All Others	Thallium
Beryllium	Cyanides (Amenable)	Nickel	

#7357



**Pacific
Resource
Recovery**

3150 East Pico Boulevard, Los Angeles, CA 90023
Phone (800) 499-7145 Fax (213) 780-0078

LAND DISPOSAL RESTRICTION NOTIFICATION

Manifest Line #	Approval #	Manifest Line #	Approval #	Manifest Line #	Approval #

This notification form shall be completed by the generator and shall accompany each shipment of restricted waste subject to the Land Disposal Restrictions (40 CFR 268 Subpart C).

- Complete all information in Section I.
- Check mark all appropriate Regulated Constituents in Section II, additional applicable Sections and/or complete Section III.
- Sign and date Section IV.

SECTION I							
GENERATOR'S NAME		SPACEx					
EPA I.D. NUMBER		CAR000191536					
MANIFEST NUMBER		000765264					
TREATABILITY GROUP		(Check one) <input type="checkbox"/> Wastewater <input checked="" type="checkbox"/> Non-Wastewater					
HAZARDOUS DEBRIS		<input type="checkbox"/> Yes <input type="checkbox"/> No					
EPA HAZARDOUS WASTE CODE(S) -							
D001	F003	F005					
<input type="checkbox"/> There are no underlying hazardous constituents of concern, or <input checked="" type="checkbox"/> There are underlying hazardous constituents of concern which do not meet the treatment standards of 40 CFR 268.48, Table UTS - Universal Treatment Standards (see Section II).							
I have used the following to make the above determination: <input checked="" type="checkbox"/> Knowledge of the waste producing process, raw materials used and reaction products, or <input type="checkbox"/> Results of analysis for the constituents in Table UTS.							
Waste analysis data attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No							

NON-RCRA WASTE <input type="checkbox"/> LIQUID <input type="checkbox"/> SOLID Effective 1/31/96 - Pursuant to Section 25179.6 of the Health and Safety Code, NON-RCRA aqueous and solid waste containing organics has been repealed from Land Disposal Restriction Notification requirements.	(Check all that apply) <input type="checkbox"/> 11a <input type="checkbox"/> 11b <input type="checkbox"/> 11c <input type="checkbox"/> 11d <input type="checkbox"/> other (28a - 28i)
--	--

UNIVERSAL TREATMENT STANDARDS

SECTION II
<p>The Underlying Hazardous Constituents must be identified for waste streams which carry the EPA Waste Codes F001-F005, F039, D001 (only D001 not treated by RORGs; CMBST or POLYM), D005-D043 (only D005-D043 if treated in Non-CWA, Non-CWA equivalent or Non-SDWA facilities).</p> <p>The wastes identified on the aforementioned manifest document number and bearing the EPA Hazardous Waste Number(s) identified in Section I are subject to the Land Disposal Restrictions of 40 CFR 268 Subpart C. The wastes do not meet the applicable treatment standards specified in 40 CFR 268 Subpart D or exceeds the applicable prohibition levels specified in 40 CFR 268.32 (California list wastes) or RCRA Section 3004(d). In compliance with the requirements of 40 CFR 268.7 and 268.9 we are indicating below the applicable constituents of concern.</p>



ADDITIONAL RESTRICTED WASTE IDENTIFICATION/ TREATMENT STANDARDS AND CERTIFICATION FORM

Complete Section III if the restricted wastes (i.e., EPA Hazardous Waste Code) as listed in Section I do not meet the applicable treatment standards in 40 CFR 268.40 (Treatment Standards for Hazardous Wastes) and have not been identified as required in Section II.

[illegible]

Company Name: SPACEX

Authorized Signature: Mark Drop 18/1

Printed Name: Mark Drop

Date: 4-30-09

40 CFR 268.48 TABLE UTS - UNIVERSAL TREATMENT STANDARDS (Continued)

Regulated constituent - common name	CAS NO.	Wastewater standard concentration in mg/l	Non-wastewater standard concentration in mg/kg unless noted as "mg/l TCLP"	Regulated constituent - common name	CAS NO.	Wastewater standard concentration in mg/l	Non-wastewater standard concentration in mg/kg unless noted as "mg/l TCLP"	Regulated constituent - common name	CAS NO.	Wastewater standard concentration in mg/l	Non-wastewater standard concentration in mg/kg unless noted as "mg/l TCLP"
□ Acenaphthylene	208-96-8	0.059	3.4	□ m-Dichlorobenzene	541-73-1	0.036	6	□ p-Nitroaniline	100-01-6	0.028	28
□ Acenaphthene	83-32-9	0.059	3.4	□ o-Dichlorobenzene	95-50-1	0.088	6	□ o-Nitroaniline	88-74-4	0.27	14
□ Acetone	67-64-1	0.28	160	□ p-Dichlorobenzene	106-46-7	0.090	6	□ Nitrobenzene	98-95-3	0.068	14
□ Acetonitrile	75-05-8	5.6	1.8	□ Dichlorodifluoromethane	75-71-8	0.23	7.2	□ 5-Nitro-o-toluidine	99-55-8	0.32	28
□ Acetophenone	96-86-2	0.010	9.7	□ 1,1-Dichloroethane	75-34-3	0.059	6	□ o-Nitrophenol	88-75-5	0.28	13
□ 2-Acetylaminofluorene	53-96-3	0.059	140	□ 1,2-Dichloroethane	107-06-2	0.21	6	□ p-Nitrophenol	100-02-7	0.12	29
□ Acrolein	107-02-8	0.29	NA	□ 1,1-Dichloroethylene	75-34-4	0.025	6	□ N-Nitrosodiethylamine	55-18-5	0.40	28
□ Acrylamide	79-06-1	19	23	□ trans-1,2-Dichloroethylene	156-60-5	0.054	30	□ N-Nitrosodimethylamine	62-75-9	0.40	2.3
□ Acrylonitrile	107-13-1	0.24	84	□ 2,4-Dichlorophenol	120-83-2	0.044	14	□ N-Nitroso-di-n-butylamine	924-16-3	0.40	17
□ Aldrin	309-00-2	0.021	0.066	□ 2,6-Dichlorophenol	87-65-0	0.044	14	□ N-Nitrosomethylmethanamine	10595-95-6	0.40	2.3
□ 4-Aminobiphenyl	92-87-1	0.13	NA	□ 1,2-Dichloropropane	78-87-5	0.85	18	□ N-Nitrosomorpholine	59-89-2	0.40	2.3
□ Aniline	62-53-3	0.81	14	□ cis-1,3-Dichloropropylene	10061-01-5	0.036	18	□ N-Nitrosopiperidine	100-75-4	0.013	35
□ Anthracene	120-12-7	0.059	3.4	□ trans-1,3-Dichloropropylene	10061-02-6	0.036	18	□ N-Nitrosopyrrolidine	930-55-2	0.013	35
□ Aramite	140-57-8	0.36	NA	□ Dieldrin	60-57-1	0.017	0.13	□ Parathion	56-38-2	0.014	4.6
□ alpha-BHC	319-84-6	0.00014	0.066	□ Dieldrin phthalate	84-66-2	0.20	28	□ Pentachlorobenzene	608-93-5	0.055	10
□ beta-BHC	319-85-7	0.00014	0.066	□ p-Dimethylaminoazobenzene	60-11-7	0.13	NA	□ Pentachlorodibenzo-furans	NA	0.000035	0.001
□ delta-BHC	319-86-8	0.023	0.066	□ 2,4-Dimethyl phenol	105-87-9	0.036	14	□ Pentachlorodibenzo-p-dioxins	NA	0.000063	0.001
□ gamma-BHC	58-89-9	0.0017	0.066	□ Dimethyl phthalate	131-11-3	0.047	28	□ Pentachloroethane	76-01-7	0.055	6
□ Benz(a)anthracene	56-55-3	0.059	3.4	□ Di-n-butyl phthalate	84-74-2	0.057	28	□ Pentachloronitrobenzene	82-68-8	0.055	4.8
□ Benzal chloride	98-87-3	0.055	6.0	□ 1,4-Dinitrobenzene	100-25-4	0.32	2.3	□ Pentachlorophenol	87-86-5	0.089	7.4
□ Benzene	71-43-2	0.14	10	□ 4,6-Dinitro-o-cresol	534-52-1	0.28	160	□ Phenacetin	62-44-2	0.081	16
□ Benzo(a)pyrene	50-32-8	0.061	3.4	□ 2,4-Dinitrophenol	51-28-5	0.12	160	□ Phenanthrene	85-01-6	0.059	5.6
□ Benzo(b)fluoranthene	205-99-2	0.11	6.8	□ 2,4-Dinitrotoluene	121-14-2	0.32	140	□ Phenol	108-95-2	0.038	6.2
□ Benzo(g,h,i)perylene	191-24-2	0.0055	1.8	□ 2,6-Dinitrotoluene	606-20-2	0.55	28	□ Phorate	298-02-2	0.021	4.6
□ Benzo(k)fluoranthene	207-06-9	0.11	6.8	□ Di-n-octyl phthalate	117-84-0	0.017	28	□ Phthalic acid	100-21-0	0.055	28
□ bis-(2-Chloroethoxy) methane	111-91-1	0.036	7.2	□ Di-n-propyl nitrosamine	621-64-7	0.40	14	□ Phthalic anhydride	85-44-9	0.055	28
□ bis-(2-Chloroethyl) ether	111-44-4	0.033	6.0	□ Diphenylamine	122-39-4	0.92	13	□ Pronamide	23950-58-5	0.093	1.5
□ bis-(Chloroisopropyl) ether	108-60-1	0.055	7.2	□ 1,2-Diphenylhydrazine	122-66-7	0.087	NA	□ Propanenitrile (Ethyl cyanide)	107-12-0	0.24	360
□ bis-(Ethylhexyl) phthalate	117-81-7	0.28	28	□ Diphenyl nitrosamine	86-30-6	0.92	13	□ Pyrene	129-00-0	0.067	8.2
□ Bromodichloromethane	75-27-4	0.35	15	□ 1,4-Dioxane	123-91-1	NA	170	□ Pyridine	110-86-1	0.014	16
□ Bromomethane (methyl bromide)	74-83-9	0.11	15	□ p-Dimethylaminoazobenzene	60-11-7	0.13	NA	□ Saffrole	94-59-7	0.081	22
□ 4-Bromophenyl phenyl ether	101-55-3	0.055	15	□ Disulfoton	298-04-4	0.017	6.2	□ Silvex (2,4,5-TP)	93-72-1	0.72	7.9
□ n-Butyl alcohol	71-36-3	5.6	2.6	□ Endosulfan I	939-98-8	0.023	0.066	□ 2,4,5-T	93-76-5	0.72	7.9
□ Butyl benzyl phthalate	85-68-7	0.017	28	□ Endosulfan II	33213-6-5	0.029	0.13	□ 1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
□ 2-sec-Butyl-4,6-dinitrophenol dioxeb	82-85-7	0.066	2.5	□ Endosulfan sulfate	1-31-07-8	0.029	0.13	□ Tetrachlorodibenzo-furans	NA	0.000063	0.001
□ Carbon disulfide	75-15-0	3.8	4.8 TCLP	□ Endrin	72-20-8	0.0028	0.13	□ Tetrachlorodibenzo-p-dioxins	NA	0.000063	0.001
□ Carbon tetrachloride	56-23-5	0.057	6.0	□ Endrin aldehyde	7421-93-4	0.025	0.13	□ 1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
□ Chlordane (alpha & gamma isomers)	57-74-9	0.0033	0.26	□ Ethyl acetate	141-78-6	0.34	33	□ 1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
□ p-Chloroaniline	106-47-5	0.46	16	□ Ethyl benzene	100-41-4	0.057	10	□ Tetrachloroethylene	127-18-4	0.056	6.0
□ Chlorobenzene	108-90-7	0.057	6.0	□ Ethyl ether	60-29-7	0.12	160	□ 2,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
□ Chlorobenzilate	510-15-6	0.10	NA	□ Ethyl methacrylate	97-83-2	0.14	160	□ Toluene	108-88-3	0.080	10
□ 2-Chloro-1,3-butadiene	126-99-8	0.057	0.28	□ Ethylene oxide	75-21-8	0.12	NA	□ Toxaphene	8001-35-2	0.0095	2.6
□ Chlorodibromomethane	124-48-1	0.057	15	□ Famphur	52-85-7	0.017	15	□ Tribromomethane (bromofarm)	75-25-2	0.63	15
□ Chloroethane	75-00-3	0.27	6.0	□ Fluoranthene	206-44-0	0.068	3.4	□ 1,2,4-Trichlorobenzene	120-82-1	0.055	19
□ Chloroform	67-68-3	0.046	6.0	□ Fluorene	86-73-7	0.059	3.4	□ 1,1,1-Trichloroethane	71-55-6	0.054	6.0
□ p-Chloro-m-cresol	59-50-7	0.018	14	□ Heptachlor	76-44-8	0.0012	0.066	□ 1,1,2-Trichloroethane	79-00-5	0.054	6.0
□ 2-Chloroethyl vinyl ether	110-75-8	0.062	NA	□ Heptachlor epoxide	1024-57-3	0.016	0.066	□ Trichloroethylene	79-01-6	0.054	6.0
□ Chloromethane (methyl chloride)	74-87-3	0.19	30	□ Hexachlorobenzene	118-74-1	0.055	10	□ Trichloromonofluoromethane	75-69-4	0.020	30
□ 2-Chloronaphthalene	91-8-7	0.055	5.6	□ Hexachlorobutadiene	87-68-3	0.055	5.6	□ 2,4,5-Trichlorophenol	95-95-4	0.18	7.4
□ 2-Chlorophenol	95-57-8	0.044	5.7	□ Hexachlorodibenzo-furans	NA	0.000063	0.001	□ 2,4,6-Trichlorophenol	88-06-2	0.035	7.4
□ 3-Chloropropylene	107-05-1	0.036	30	□ Hexachlorodibenzo-p-dioxins	NA	0.000063	0.001	□ 1,2,3-Trichloropropane	96-18-4	0.85	30
□ Chrysene	218-01-9	0.059	3.4	□ Hexachlorocyclopentadiene	77-47-4	0.057	2.4	□ 1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.057	30
□ p-Cresol	106-44-5	0.77	5.6	□ Hexachloroethane	67-72-1	0.055	30	□ Vinyl chloride	75-01-4	0.27	6.0
□ m-Cresol	108-39-4	0.77	5.6	□ Hexachloropropylene	1886-71-7	0.035	30	□ Xylenes (total)	1330-20-7	0.32	30
□ o-Cresol	95-48-7	0.11	5.6	□ Indene (1,2,3-c,d)pyrene	193-39-5	0.0055	3.4	□ Total PCBs	1336-36-3	0.1	10
□ Cyclohexanone	108-94-1	0.36	0.75 TCLP	□ Iodomethane	74-88-4	0.19	65	□ Antimony	7440-36-0	1.9	0.07 TCLP
□ 2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	0.72	10	□ Isobutyl alcohol	78-83-1	5.6	170	□ Arsenic	7440-38-2	1.4	5.0 TCLP
□ o,p'-DDD	53-19-0	0.023	0.087	□ Isodrin	465-73-6	0.021	0.066	□ Barium	7440-39-3	1.2	21 TCLP
□ p,p'-DDD	72-54-8	0.023	0.087	□ Isosafrole	120-58-1	0.081	2.6	□ Beryllium	7440-41-7	0.82	0.02 TCLP
□ o,p'-DDE	3424-82-6	0.031	0.087	□ Kepone	143-50-8	0.0011	0.13	□ Cadmium	7440-43-9	0.69	0.2 TCLP
□ p,p'-DDE	72-55-9	0.031	0.087	□ Methacrylonitrile	126-98-7	0.24	84	□ Chromium (total)	7440-47-3	2.77	0.85 TCLP
□ o,p'-DDT	789-02-6	0.0039	0.087	□ Methanol	67-55-1	5.6	0.75 TCLP	□ Cyanide (total)	57-12-5	1.2	590*
□ p,p'-DDT	50-29-3	0.0039	0.087	□ Methapyrene	91-80-5	0.081	1.5	□ Cyanide (amenable)	57-12-5	0.86	30*
□ Dibenzo(a,h)pyrene	192-65-4	0.061	NA	□ Methoxychlor	72-43-5	0.25	0.18	□ Fluoride	16964-48-8	35	NA
□ Dibenzo(a,h)anthracene	53-70-3	0.055	8.2	□ 3-Methylcholanthrene	56-49-5	0.0055	15	□ Lead	7439-92-1	0.69	0.75 TCLP
□ Iridis-(2,3-Dibromopropyl) phosphate	126-72-7	0.11	0.10	□ 4,4-Methylene-bis-(2-chloroaniline)	101-14-4	0.50	30	□ Mercury - NWW from Retort	7439-97-6	0.15	0.20 TCLP
□ 1,2-Dibromo-3-Chloropropane	96-12-8	0.11	15	□ Methylene chloride	75-09-2	0.089	30	□ Mercury - all others	7439-97-6	0.15	0.025 TCLP
□ 1,2-Dibromothane (ethylene dibromide)	106-93-4	0.028	15	□ Methyl ethyl ketone	78-93-3	0.28	36	□ Nickel	7440-02-0	3.98	13.6 TCLP
□ Dibromomethane	74-95-3	0.11	15	□ Methyl isobutyl ketone	108-10-1	0.14	33	□ Selenium*	7782-49-2	0.82	5.7 TCLP
				□ Methyl methacrylate	80-62-6	0.14	160	□ Silver	7440-22-4	0.43	0.11 TCLP
				□ Methyl methanesulfonate	66-27-3	0.018	NA	□ Sulfide	8496-25-8	14.0	NA
				□ Methyl Parathion	298-00-0	0.014	4.6	□ Thallium	7440-28-0	1.4	0.20 TCLP
				□ Naphthalene	91-20-3	0.059	5.6	□ Vanadium*	7440-62-2	4.3	1.6 TCLP
				□ 2-Naphthylamine	91-59-8	0.52	NA	□ Zinc*	7440-66-8	2.61	4.3 TCLP

Siemens Water Technologies Corp.

#7434

LAND DISPOSAL RESTRICTION NOTIFICATION FORM

Pursuant to CCR Title 22, Section 66268.7(40 CFR 268.7(a)), I hereby notify that this waste shipment contains one or more of the following wastes restricted under the land disposal restrictions for which applicable treatment standards are set forth in CCR Title 22, Section 66268.40 (40 CFR 268.40)

Manifest Num# 000765308JJK Generator Name : SPACE EXPLORATION EPA# CAR000191536

RCRA HAZARDOUS WASTE INFORMATION

U.S.F. PROFILE NUMBER/ MANIFEST LINE ITEM NUMBER	List all D, F, K, U & P Codes	Subcategory (IF ANY)	WASTEWATER*/ NONWASTEWATER WW NWW	California List ** Per CCR Title 22, Section 66268.32	Hazardous Debris Subject To CCR Title 22, Sec 66268.45
1)P177814	D002,D007		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2)AP169390	D006,D007		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3)AP180587			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4)350728-48			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ADDITIONAL INFORMATION FOR D001, D002, D012-43, F001-5 & F039 WASTE STREAMS: (check one)

- ☒ There are no underlying hazardous constituents (UHCs) present
- ☐ There are underlying hazardous constituents (UHCs) present which do not meet treatment standards per CCR Title 22, Section 66268.48
- (Use the attached UTS Table and check the appropriate constituent(s) present in the waste stream)

DETERMINATION BASED UPON : (check one)

- ☒ Knowledge of the process generating the waste and the raw materials used and the reaction products
- ☐ Results from analytical testing
- Analytical results attached ☐ YES ☐ NO

TERM DEFINITIONS:

* **WASTEWATER** = per CCR Title 22, Section 66260.10, WASTE THAT CONTAINS LESS THAN 1% BY WEIGHT TOTAL TOXIC ORGANICS (TOCs) AND 1% BY WEIGHT TOTAL SUSPENDED SOLIDS (TSS).

* **CALIFORNIA LIST** = THE FOLLOWING HAZARDOUS WASTES ARE PROHIBITED FROM LAND DISPOSAL: per CCR Title 22, Section 66268.32

- Liquid hazardous waste with a pH less than or equal to 2.0
- Liquid hazardous waste containing PCB's at concentration of greater than or equal to 50 ppm
- Liquid hazardous waste, including free liquids associated with any solids/sludge, containing free cyanide at concentrations greater than or equal to 1,000 mg/L
- Liquid hazardous waste, including free liquids associated with any solids/sludge, containing metals at concentrations greater than or equal to the following:

ARSENIC	500 mg/L	MERCURY	20 mg/L
CADMIUM	100 mg/L	NICKEL	134 mg/L
CHROMIUM	500 mg/L	SELENIUM	100 mg/L
LEAD	500 mg/L	THALLIUM	130 mg/L

- Liquid hazardous waste, that contains HOC's in total concentration greater than or equal to 1,000 mg/L
- Non-liquid RCRA hazardous waste containing HOC's in total concentration greater than or equal to 1,000 mg/L

CERTIFICATION

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification. I believe that the information I have submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment

SOS for SPACE EXPLORATION

COMPANY NAME

AUTHORIZED SIGNATURE

06/12/09

DATE



Pacific
Resource
Recovery

3150 East Pico Boulevard, Los Angeles, CA 90023
Phone (800) 499-7145 Fax (213) 780-0078

LAND DISPOSAL RESTRICTION NOTIFICATION

Manifest Line #	Approval #	Manifest Line #	Approval #	Manifest Line #	Approval #
1	28090206				
2	28060111				

This notification form shall be completed by the generator and shall accompany each shipment of restricted waste subject to the Land Disposal Restrictions (40 CFR 268 Subpart C).

- Complete all information in Section I.
- Check mark all appropriate Regulated Constituents in Section II, additional applicable Sections and/or complete Section III.
- Sign and date Section IV.

SECTION I									
GENERATOR'S NAME		SPACEX							
EPA I.D. NUMBER		CAR000191536							
MANIFEST NUMBER		000765352 JTK							
TREATABILITY GROUP		(Check one) <input type="checkbox"/> Wastewater <input checked="" type="checkbox"/> Non-Wastewater							
HAZARDOUS DEBRIS		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No							
EPA HAZARDOUS WASTE CODE(S) -									
D001	F003	F005							
<input type="checkbox"/> There are no underlying hazardous constituents of concern, or									
<input checked="" type="checkbox"/> There are underlying hazardous constituents of concern which do not meet the treatment standards of 40 CFR 268.48, Table UTS - Universal Treatment Standards (see Section II).									
I have used the following to make the above determination:									
<input checked="" type="checkbox"/> Knowledge of the waste producing process, raw materials used and reaction products, or									
<input type="checkbox"/> Results of analysis for the constituents in Table UTS.									
Waste analysis data attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No									

NON-RCRA WASTE <input type="checkbox"/> LIQUID <input type="checkbox"/> SOLID Effective 1/31/96 - Pursuant to Section 25179.6 of the Health and Safety Code, NON-RCRA aqueous and solid waste containing organics has been repealed from Land Disposal Restriction Notification requirements.	(Check all that apply) <input type="checkbox"/> 11a <input type="checkbox"/> 11b <input type="checkbox"/> 11c <input type="checkbox"/> 11d <input type="checkbox"/> other (28a - 28i) <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>										

UNIVERSAL TREATMENT STANDARDS

SECTION II
<p>The Underlying Hazardous Constituents must be identified for waste streams which carry the EPA Waste Codes F001-F005, F039, D001 (only D001 not treated by RORGS; CMBST or POLYM), D005-D043 (only D005-D043 if treated in Non-CWA, Non-CWA equivalent or Non-SDWA facilities).</p> <p>The wastes identified on the aforementioned manifest document number and bearing the EPA Hazardous Waste Number(s) identified in Section I are subject to the Land Disposal Restrictions of 40 CFR 268 Subpart C. The wastes do not meet the applicable treatment standards specified in 40 CFR 268 Subpart D or exceeds the applicable prohibition levels specified in 40 CFR 268.32 (California list wastes) or RCRA Section 3004(d). In compliance with the requirements of 40 CFR 268.7 and 268.9 we are indicating below the applicable constituents of concern.</p>



3150 East Pico Boulevard, Los Angeles, CA 90023
Phone (800) 499-7145 Fax (213) 780-0078

ADDITIONAL RESTRICTED WASTE IDENTIFICATION/ TREATMENT STANDARDS AND CERTIFICATION FORM

Complete Section III if the restricted wastes (i.e., EPA Hazardous Waste Code) as listed in Section I do not meet the applicable treatment standards in 40 CFR 268.40 (Treatment Standards for Hazardous Wastes) and have not been identified as required in Section II.

[illegible]

I hereby certify that all information submitted in this and all associated documents is complete and accurate to the best of my knowledge and information.

SPACEX



MARK DROP

07.21.09

40 CFR 268.48 TABLE UTS – UNIVERSAL TREATMENT STANDARDS (Continued)

¹CAS means Chemical Abstract Services. When the waste code and/or regulated constituents are described as a combination of a chemical with its salts and/or esters, the CAS number is given for the parent compound only.

²Concentration standards for wastewaters are expressed in mg/l are based on analysis of composite samples.

³Except for Cyanides (Total and Amenable) the non-wastewater treatment standards expressed as a concentration were established, in part, based upon incineration in units operated in accordance with the technical requirements of 40 CFR part 264, subpart 0 or 40 CFR part 265, subpart 0, or based upon combustion in fuel substitution units operating in accordance with applicable technical requirements. A facility may comply with these treatments standards according to provisions in 40 CFR 268.40(d). All concentration standards for nonwastewaters are based on analysis of grab samples.

⁴Both Cyanides (Total) and Cyanides (Amenable) for non-wastewaters are to be analyzed using Method 9010 or 9012, found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication SW-846, as incorporated by reference in 40 CFR 260.11, with a sample size of 10 grams and a distillation time of one hour and 15 minutes.

⁵These constituents are not "underlying hazardous constituents" in characteristic wastes, according to the definition at §268.2 (j).

⁶Between August 26, 1996, and August 26, 1997, these constituents are not "underlying hazardous constituents" as defined at §268.2 (l) of this Part. Note: NA means not applicable.

Please complete as applicable:

Wastes with organic constituents having treatment standards expressed as concentration levels based in whole or in part on the analytical detection limit alternative specified in §268.40(d).

- ☐ I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the non-wastewater organic constituents have been treated by combustion units as specified in 268.42, Table 1. I have been unable to detect the non-wastewater organic constituents, despite having used best good-faith efforts to analyze for such constituents. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

Wastes with treatment standards expressed as concentrations in the waste extract Toxicity Characteristic Leaching Procedure (TCLP).

- ☐ I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the treatment standards specified in 40 CFR 268.40 without impermissible dilution of the prohibited waste. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

☒ Alternative Treatment Standard Lab Pack

Manifest Line No.

2					
---	--	--	--	--	--

- ☐ I certify under penalty of law that I personally have examined and am familiar with the waste and that the lab pack contains only wastes that have not been excluded under Appendix IV to 40 CFR Part 268 and that this lab pack will be sent to a combustion facility in compliance with the alternative treatment standards for lab packs at 40 CFR 268.42(c). I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment.

- ☐ I hereby certify under penalty of law that there are no PCBs (polychlorinated biphenyls) contained in the oil waste being manifested to Pacific Resource Recovery. I also understand that a sample of the load will be retained and that the generator will be responsible for the clean-up of contaminated equipment, tanks, etc. if PCBs are present in the waste.

Benzene NESHA Control Requirement:

For Chemical Manufacturers, Petroleum Refineries, Coke By-Product Facilities and RCRA TSDFs handling wastes subject to 40 CFR 61 subpart FF ONLY:

- ☐ This waste is a "Controlled Benzene Waste" which is subject to the notification requirements of 40 CFR 61 Subpart FF.

Manifest Line No.

--	--	--	--	--	--

California List Wastes:

- ☐ Liquid hazardous wastes having a pH less than or equal to 2.0
- ☐ Liquid hazardous wastes containing PCBs at a concentration greater than or equal to 50 ppm
- ☐ Liquid hazardous wastes that contain HOCs in total concentration greater than or equal to 1000 mg/l
- ☐ Nonliquid hazardous wastes containing HOCs in total concentration greater than or equal to 1000 mg/kg
- ☐ Free (amenable to chlorination) cyanides greater than or equal to 1000 mg/l
- ☐ One or more of the following metals greater than or equal to the following:
- Arsenic and/or compounds: 500 mg/l
 - Cadmium and/or compounds: 100 mg/l
 - Chromium and/or compounds: 500 mg/l
 - Lead and/or compounds: 500 mg/l
 - Mercury and/or compounds: 20 mg/l
 - Nickel and/or compounds: 134 mg/l
 - Selenium and/or compounds: 100 mg/l
 - Thallium and/or compounds: 130 mg/l

40 CFR 268.48 TABLE UTS - UNIVERSAL TREATMENT STANDARDS (Continued)

Regulated constituent - common name	CAS NO.	Wastewater standard concentration in mg/l	Non-wastewater standard concentration in mg/kg unless noted as "mg/l TCLP"	Regulated constituent - common name	CAS NO.	Wastewater standard concentration in mg/l	Non-wastewater standard concentration in mg/kg unless noted as "mg/l TCLP"	Regulated constituent - common name	CAS NO.	Wastewater standard concentration in mg/l	Non-wastewater standard concentration in mg/kg unless noted as "mg/l TCLP"
□ Ageraphthylene	208-96-8	0.059	3.4	□ m-Dichlorobenzene	541-73-1	0.036	6	□ p-Nitroaniline	100-01-6	0.028	28
□ Acenaphthene	83-32-9	0.059	3.4	□ o-Dichlorobenzene	95-50-1	0.088	6	□ o-Nitroaniline	88-74-4	0.27	14
□ Acetone	67-64-1	0.28	160	□ p-Dichlorobenzene	106-46-7	0.090	6	□ Nitrobenzene	98-95-3	0.068	14
□ Acetonitrile	75-05-8	5.6	1.8	□ Dichlorodifluoromethane	75-71-8	0.23	7.2	□ 5-Nitro-o-toluidine	99-55-8	0.32	28
□ Acetophenone	96-86-2	0.010	9.7	□ 1,1-Dichloroethane	75-34-3	0.059	6	□ o-Nitrophenol	88-75-5	0.28	13
□ 2-Acetylaminofluorene	53-96-3	0.059	140	□ 1,2-Dichloroethane	107-06-2	0.21	6	□ p-Nitrophenol	100-02-7	0.12	29
□ Acrolein	107-02-8	0.29	NA	□ 1,1-Dichloroethylene	75-34-4	0.025	6	□ N-Nitrosodibutylamine	55-18-5	0.40	28
□ Acrylamide	79-06-1	19	23	□ trans-1,2-Dichloroethylene	158-60-5	0.054	30	□ N-Nitrosodimethylamine	62-75-9	0.40	2.3
□ Acrylonitrile	107-13-1	0.24	84	□ 2,4-Dichlorophenol	120-63-2	0.044	14	□ N-Nitroso-di-n-butylamine	924-16-3	0.40	17
□ Aldrin	209-00-2	0.021	0.068	□ 2,6-Dichlorophenol	87-65-0	0.044	14	□ N-Nitrosomethylthylamine	10595-95-6	0.40	2.3
□ 4-Aminobiphenyl	92-67-1	0.13	NA	□ 1,2-Dichloropropane	78-87-5	0.85	18	□ N-Nitrosomorpholine	59-89-2	0.40	2.3
□ Aniline	62-53-3	0.81	14	□ cis-1,3-Dichloropropylene	10061-01-5	0.036	18	□ N-Nitrosopiperidine	100-75-4	0.013	35
□ Anthracene	120-12-7	0.059	3.4	□ trans-1,3-Dichloropropylene	10061-02-6	0.036	18	□ N-Nitrosopyrrolidine	930-55-2	0.013	35
□ Arzamil	140-57-8	0.36	NA	□ Dieldrin	80-57-1	0.017	0.13	□ Parathion	56-38-2	0.014	4.6
□ alpha-BHC	319-84-6	0.00014	0.066	□ Diethyl phthalate	84-66-2	0.20	28	□ Pentachlorobenzene	608-93-5	0.055	10
□ beta-BHC	319-85-7	0.00014	0.066	□ p-Dimethylaminobenzene	60-11-7	0.13	NA	□ Pentachlorodibenzo-furans	NA	0.000035	0.001
□ delta-BHC	319-86-5	0.023	0.066	□ 2,4-Dimethyl phenol	105-67-9	0.036	14	□ Pentachlorodibenzo-p-dioxins	NA	0.000063	0.001
□ gamma-BHC	58-89-9	0.0017	0.066	□ Dimethyl phthalate	131-11-3	0.047	28	□ Pentachloroethane	76-01-7	0.055	6
□ Benz(a)anthracene	56-55-3	0.058	3.4	□ Di-n-butyl phthalate	84-74-2	0.057	28	□ Pentachloronitrobenzene	82-68-8	0.055	4.8
□ Benzal chloride	98-87-3	0.055	6.0	□ 1,4-Dinitrobenzene	100-25-4	0.32	2.3	□ Pentachlorophenol	87-86-5	0.089	7.4
□ Benzene	71-43-2	0.14	10	□ 4,6-Dinitro-o-cresol	534-52-1	0.28	160	□ Phenacetin	62-44-2	0.081	16
□ Benzo(a)pyrene	50-32-8	0.061	3.4	□ 2,4-Dinitrophenol	51-28-5	0.12	160	□ Phenanthrene	85-01-8	0.059	5.6
□ Benzo(b)fluoranthene	205-99-2	0.11	6.8	□ 2,4-Dinitrotoluene	121-14-2	0.32	140	□ Phenol	108-95-2	0.039	6.2
□ Benzo(g,h,i)perylene	191-24-2	0.0055	1.8	□ 2,6-Dinitrotoluene	606-20-2	0.55	28	□ Phorate	298-02-2	0.021	4.6
□ Benzo(k)fluoranthene	207-09-9	0.11	6.8	□ Di-n-octyl phthalate	117-84-0	0.017	28	□ Phthalic acid	100-21-0	0.055	28
□ bis-(2-Chloroethoxy) methane	111-91-1	0.036	7.2	□ Di-n-propylthiosamine	621-84-7	0.40	14	□ Phthalic anhydride	85-44-9	0.055	28
□ bis-(2-Chloroethyl) ether	111-44-4	0.033	6.0	□ Diphenylamine	122-39-4	0.92	13	□ Pronamide	23950-58-5	0.093	1.5
□ bis-(Chloroisopropyl) ether	108-60-1	0.055	7.2	□ 1,2-Diphenylhydrazine	122-68-7	0.087	NA	□ Propanenitrile (Ethyl cyanide)	107-12-0	0.24	360
□ bis-(Ethylhexyl) phthalate	117-81-7	0.28	28	□ Diphenylmethylamine	86-30-6	0.92	13	□ Pyrene	129-00-0	0.067	8.2
□ Bromodichloromethane	75-27-4	0.35	15	□ 1,4-Dioxane	123-91-1	NA	170	□ Pyridine	110-86-1	0.014	16
□ Bromomethane (methyl bromide)	74-83-9	0.11	15	□ p-Dimethylaminobenzene	60-11-7	0.13	NA	□ Saffrole	94-59-7	0.081	22
□ 4-Bromophenyl phenyl ether	101-55-3	0.055	15	□ Disulfoton	298-04-4	0.017	6.2	□ Silvex (2,4,5-TP)	93-72-1	0.72	7.9
□ n-Butyl alcohol	71-36-3	5.6	2.6	□ Endosulfan I	939-96-8	0.023	0.066	□ 2,4,5-T	93-78-5	0.72	7.9
□ Butyl benzyl phthalate	85-68-7	0.017	28	□ Endosulfan II	33213-6-5	0.029	0.13	□ 1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
□ 2-sec-Butyl-4,6-dinitrophenol diacetate	88-85-7	0.068	2.5	□ Endosulfan sulfate	1-31-07-8	0.029	0.13	□ Tetrachlorodibenzo-furans	NA	0.000063	0.001
□ Carbon disulfide	75-15-0	3.8	4.8 TCLP	□ Endrin	72-20-8	0.0028	0.13	□ Tetrachlorodibenzo-p-dioxins	NA	0.000063	0.001
□ Carbon tetrachloride	56-23-5	0.057	6.0	□ Endrin aldehyde	7421-93-4	0.025	0.13	□ 1,1,1,2-Tetrachloroethane	830-20-6	0.057	6.0
□ Chlordane (alpha & gamma isomers)	57-74-9	0.0033	0.26	□ Ethyl acetate	141-78-6	0.34	33	□ 1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
□ p-Chloroaniline	106-47-8	0.46	16	□ Ethyl benzene	100-41-4	0.057	10	□ Tetrachloroethylene	127-18-4	0.056	6.0
□ Chlorobenzene	108-90-7	0.057	5.0	□ Ethyl ether	60-29-7	0.12	160	□ 2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
□ Chlorobenzilate	510-15-6	0.10	NA	□ Ethyl methacrylate	97-83-2	0.14	160	□ Toluene	108-88-3	0.080	10
□ 2-Chloro-1,3-butadiene	126-99-8	0.057	0.28	□ Ethylene oxide	75-21-8	0.12	NA	□ Toxaphene	8001-35-2	0.0095	2.6
□ Chlorodibromomethane	124-48-1	0.057	15	□ Pamphur	52-85-7	0.017	15	□ Trichloromethane (bromofom)	75-25-2	0.63	15
□ Chloroethane	75-00-3	0.27	6.0	□ Fluoranthene	206-44-0	0.068	3.4	□ 1,2,4-Trichlorobenzene	120-82-1	0.055	19
□ Chloroform	67-66-3	0.046	6.0	□ Fluorene	86-73-7	0.059	3.4	□ 1,1,1-Trichloroethane	71-55-6	0.054	6.0
□ p-Chloro-m-cresol	59-50-7	0.018	14	□ Heptachlor	75-44-8	0.0012	0.066	□ 1,1,2-Trichloroethane	79-00-5	0.054	6.0
□ 2-Chloroethyl vinyl ether	110-75-8	0.062	NA	□ Heptachlor epoxide	1024-57-3	0.016	0.066	□ Trichloroethylene	79-01-6	0.054	6.0
□ Chloromethane (methyl chloride)	74-87-3	0.19	30	□ Hexachlorobenzene	118-74-1	0.055	10	□ Trichloromethylfluoromethane	75-69-4	0.020	30
□ 2-Chloronaphthalene	91-8-7	0.055	5.6	□ Hexachlorobutadiene	87-68-3	0.055	5.6	□ 2,4,5-Trichlorophenol	95-95-4	0.18	7.4
□ 2-Chlorophenol	95-57-8	0.044	5.7	□ Hexachlorodibenzo-furans	NA	0.000063	0.001	□ 2,4,6-Trichlorophenol	88-06-2	0.035	7.4
□ 3-Chloropropylene	107-05-1	0.036	30	□ Hexachlorodibenzo-p-dioxins	NA	0.000063	0.001	□ 1,2,3-Trichloropropane	96-18-4	0.85	30
□ Chrysene	218-01-9	0.059	3.4	□ Hexachlorocyclopentadiene	77-47-4	0.057	2.4	□ 1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.057	30
□ o-Cresol	106-44-5	0.77	5.6	□ Hexachloropropylene	1888-71-7	0.035	30	□ Vinyl chloride	75-01-4	0.27	6.0
□ m-Cresol	108-39-4	0.77	5.6	□ Indene (1,2,3-c,d)pyrene	193-39-5	0.0055	3.4	□ Xylenes (total)	1330-20-7	0.32	30
□ p-Cresol	95-48-7	0.11	5.6	□ Iodomethane	74-85-4	0.19	65	□ Total PCBs	1936-36-3	0.1	10
□ Cyclohexanone	108-94-1	0.38	0.75 TCLP	□ Isobutyl alcohol	78-83-1	5.6	170	□ Antimony	7440-36-0	1.9	0.07 TCLP
□ 2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	0.72	10	□ Isodrin	465-73-6	0.021	0.066	□ Arsenic	7440-38-2	1.4	5.0 TCLP
□ o,p'-DDD	53-19-0	0.023	0.087	□ Isosafrole	120-58-1	0.081	2.6	□ Barium	7440-39-3	1.2	21 TCLP
□ p,p'-DDD	72-54-8	0.023	0.087	□ Kepone	145-50-8	0.0011	0.13	□ Beryllium	7440-41-7	0.82	0.02 TCLP
□ o,p'-DDE	3424-82-6	0.031	0.087	□ Methacrylonitrile	126-98-7	0.24	84	□ Cadmium	7440-43-9	0.69	0.2 TCLP
□ p,p'-DDE	72-55-9	0.031	0.087	□ Methanol	67-56-1	5.6	0.75 TCLP	□ Chromium (total)	7440-47-3	2.77	0.85 TCLP
□ o,p'-DDT	789-02-6	0.0039	0.087	□ Methapyrene	91-80-5	0.081	1.5	□ Cyanide (total)	57-12-5	1.2	590*
□ p,p'-DDT	50-29-3	0.0039	0.087	□ Methoxychlor	72-43-5	0.25	0.18	□ Cyanide (amenable)	57-12-5	0.86	30*
□ Dibenzo(a,p)pyrene	192-85-4	0.061	NA	□ 3-Methylcholanthrene	58-49-5	0.0055	15	□ Fluoride	16984-48-8	35	NA
□ Dibenzo(a,h)anthracene	53-70-3	0.055	8.2	□ 4,4'-Methylene-bis-(2-chloroaniline)	101-14-4	0.50	30	□ Lead	7439-92-1	0.69	0.75 TCLP
□ bis-(2,3-Dibromopropyl) phosphate	126-72-7	0.11	0.10	□ Methylene chloride	75-09-2	0.089	30	□ Mercury - RWH from Refort	7439-97-8	0.15	0.20 TCLP
□ 1,2-Dibromo-3-Chloropropane	96-12-8	0.11	15	□ Methyl ethyl ketone	78-93-3	0.28	38	□ Mercury - all others	7439-97-6	0.15	0.025 TCLP
□ 1,2-Dibromomethane (ethylene dibromide)	106-93-4	0.028	15	□ Methyl isobutyl ketone	106-10-1	0.14	33	□ Nickel	7440-02-0	3.98	13.6 TCLP
□ Dibromomethane	74-95-3	0.11	15	□ Methyl methacrylate	80-62-6	0.14	160	□ Selenium*	7782-49-2	0.82	5.7 TCLP
				□ Methyl methansulfonate	66-27-3	0.018	NA	□ Silver	7440-22-4	0.43	0.11 TCLP
				□ Methyl Parathion	298-00-0	0.014	4.6	□ Sulfide	8486-25-8	1.40	NA
				□ Naphthalene	91-20-3	0.059	5.6	□ Thallium	7440-28-0	1.4	0.20 TCLP
				□ 2-Naphthylamine	91-59-8	0.52	NA	□ Vanadium*	7440-62-2	4.3	1.6 TCLP
								□ Zinc*	7440-66-6	2.61	4.3 TCLP

Siemens Water Technologies Corp.

LAND DISPOSAL RESTRICTION NOTIFICATION FORM

Pursuant to CCR Title 22, Section 66268.7(40 CFR 268.7(a), I hereby notify that this waste shipment contains one or more of the following wastes restricted under the land disposal restrictions for which applicable treatment standards are set forth in CCR Title 22, Section 66268.40 (40 CFR 268.40)

Manifest Num.000765354 JJK Generator Name : SPACEX EPA# <u>CAR000191536</u>						
RCRA HAZARDOUS WASTE INFORMATION						
U.S.F. PROFILE NUMBER/ MANIFEST LINE ITEM NUMBER	List all D, F, K, U & P Codes	Subcategory (IF ANY)	WASTEWATER*/ NONWASTEWATER WW NWW		California List ** Per CCR Title 22, Section 66268.32	Hazardous Debris Subject To CCR Title 22, Sec 66268.45
1) AP169389	D007			X	<input type="checkbox"/> For: _____	<input type="checkbox"/>
2) AP180587				X	<input type="checkbox"/> For: _____	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>

ADDITIONAL INFORMATION FOR D001, D002, D012-43, F001-5 & F039 WASTE STREAMS: (check one)

☒ There are no underlying hazardous constituents (UHCs) present

☐ There are underlying hazardous constituents (UHCs) present which do not meet treatment standards per CCR Title 22, Section 66268.48
(Use the attached UTS Table and check the appropriate constituent(s) present in the waste stream)

DETERMINATION BASED UPON : (check one)

☒ Knowledge of the process generating the waste and the raw materials used and the reaction products

☐ Results from analytical testing Analytical results attached ☐ YES ☐ NO

TERM DEFINITIONS:

* **WASTEWATER** = per CCR Title 22, Section 66260.10, WASTE THAT CONTAINS LESS THAN 1% BY WEIGHT TOTAL TOXIC ORGANICS (TOCs) AND 1% BY WEIGHT TOTAL SUSPENDED SOLIDS (TSS).

* **CALIFORNIA LIST**= THE FOLLOWING HAZARDOUS WASTES ARE PROHIBITED FROM LAND DISPOSAL: per CCR Title 22, Section 66268.32

- Liquid hazardous waste with a pH less than or equal to 2.0
- Liquid hazardous waste containing PCB's at concentration of greater than or equal to 50 ppm
- Liquid hazardous waste, including free liquids associated with any solids/sludge, containing free cyanide at concentrations greater than or equal to 1,000 mg/L
- Liquid hazardous waste, including free liquids associated with any solids/sludge, containing metals at concentrations greater than or equal to the following:

ARSENIC	500 mg/L	MERCURY	20 mg/L
CADMIUM	100 mg/L	NICKEL	134 mg/L
CHROMIUM	500 mg/L	SELENIUM	100 mg/L
LEAD	500 mg/L	THALLIUM	130 mg/L

- Liquid hazardous waste, that contains HOC's in total concentration greater than or equal to 1,000 mg/L
- Non-liquid RCRA hazardous waste containing HOC's in total concentration greater than or equal to 1,000 mg/L

CERTIFICATION

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification. I believe that the information I have submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment

SPACEX

7.21.09

COMPANY NAME
AUTHORIZED SIGNATURE
DATE



Rho Chem Corporation,
a wholly owned subsidiary of PHILIP SERVICES CORP.,
RCRA Land Disposal Restriction Notification Form EZ

Generator: SPACE X

EPA I.D. #: CAR000191536

Profile #:

Manifest #: 000765220355JJK

The wastes identified on this form are subject to the land disposal restrictions of 40 CFR Part 268. The wastes do not meet the treatment standards specified in 268.32. Pursuant to 40 CFR 268.7(a), the required information applicable to each waste is identified below (check all boxes that apply):

Treatability Group: ☐ Wastewater ☒ Nonwastewater
(Wastewaters contain less than 1% filterable solids and less than 1% Total Organic Carbon)

- ☐ **D001 Ignitable (except for High TOC) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems**
(Complete form UC, unless D001 is the only "D" code and the waste is to be combusted or recovered.)
- ☐ D001 Ignitable (except for High TOC) managed in CWA/ CWA-equivalent/Class I SDWA systems
- ☐ D001 High TOC Ignitable (greater than 10% total organic carbon)
- ☒ **D002 Corrosive managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems (Complete form UC)**
- ☐ D002 Corrosive managed in CWA/ CWA-equivalent/Class I SDWA systems
- ☐ D003 Reactive Sulfides based on 261.23(a)(5)
- ☐ D003 Reactive Cyanides based on 261.23(a)(5)
- ☐ **D003 Water Reactives based on 261.23(a)(2),(3) and (4) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems (Complete form UC)**
- ☐ D003 Water Reactives based on 261.23(a)(2),(3) and (4) managed in CWA/ CWA-equivalent/Class I SDWA systems
- ☐ **D003 Other Reactives based on 261.23(a)(1) (Complete form UC)**

If D004-43 boxes are checked, complete and attach Form UC to address underlying hazardous constituents (unless these wastes are to be managed in CWA/CWA-equivalent/non-CWA systems):

- | | | | |
|--|---|---|--|
| <input type="checkbox"/> D004 Arsenic | <input type="checkbox"/> D005 Barium | <input type="checkbox"/> D006 Cadmium | <input type="checkbox"/> D006 Cadmium-containing batteries |
| <input type="checkbox"/> D007 Chromium | <input checked="" type="checkbox"/> D008 Lead | <input type="checkbox"/> D008 Lead acid batteries | |
| <input type="checkbox"/> D009 High mercury inorganic (>260 mg/kg total), including incinerator residue and residues from RMERC | | | |
| <input type="checkbox"/> D009 High-mercury organic (>260 mg/kg total), not including incinerator residue | | | |
| <input type="checkbox"/> D009 Low-mercury (<260 mg/kg total) | | <input type="checkbox"/> D009 All D009 wastewaters | |
| <input type="checkbox"/> D010 Selenium | <input type="checkbox"/> D011 Silver | | |
| <input type="checkbox"/> D012 Endrin | <input type="checkbox"/> D023 <i>o</i> -Cresol | <input type="checkbox"/> D033 Hexachlorobutadiene | |
| <input type="checkbox"/> D013 Lindane | <input type="checkbox"/> D024 <i>m</i> -Cresol | <input type="checkbox"/> D034 Hexachloroethane | |
| <input type="checkbox"/> D014 Methoxychlor | <input type="checkbox"/> D025 <i>p</i> -Cresol | <input type="checkbox"/> D035 Methyl ethyl ketone | |
| <input type="checkbox"/> D015 Toxaphene | <input type="checkbox"/> D026 Cresols (Total) | <input type="checkbox"/> D036 Nitrobenzene | |
| <input type="checkbox"/> D016 2,4-D | <input type="checkbox"/> D027 <i>p</i> -Dichlorobenzene | <input type="checkbox"/> D037 Pentachlorophenol | |
| <input type="checkbox"/> D017 2,4,5-TP (Silvex) | <input type="checkbox"/> D028 1,2-Dichloroethane | <input type="checkbox"/> D038 Pyridine | |
| <input type="checkbox"/> D018 Benzene | <input type="checkbox"/> D029 1,1-Dichloroethylene | <input type="checkbox"/> D039 Tetrachloroethylene | |
| <input type="checkbox"/> D019 Carbon tetrachloride | <input type="checkbox"/> D030 2,4-Dinitrotoluene | <input type="checkbox"/> D040 Trichloroethylene | |
| <input type="checkbox"/> D020 Chlordane | <input type="checkbox"/> D031 Heptachlor | <input type="checkbox"/> D041 2,4,5-Trichlorophenol | |
| <input type="checkbox"/> D021 Chlorobenzene | <input type="checkbox"/> D032 Hexachlorobenzene | <input type="checkbox"/> D042 2,4,6-Trichlorophenol | |
| <input type="checkbox"/> D022 Chloroform | | <input type="checkbox"/> D043 Vinyl chloride | |

Note: If any bolded entries are checked, form UC must be completed to address underlying hazardous constituents, unless the material is treated in a Clean Water Act (CWA) treatment process or unless otherwise noted above.

In addition, the following wastes are included in this shipment:

- ☐ F001-F005 spent solvents. (If this box is checked, complete the F001-F005 section on the back of this form. Check the hazardous waste number(s) that applies, and identify the constituents likely to be present in the waste.)

If this shipment carries additional waste codes that are not addressed above, identify them here:

EPA Waste Code	Subcategory (if applicable)	EPA Waste Code	Subcategory (if applicable)
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

F001-F005 Spent Solvents

Check the box(es) that applies; identify the individual constituents likely to be present.

<u>Hazardous waste description</u>	<u>Regulated hazardous constituents</u>	
<input type="checkbox"/> F001 Spent halogenated solvents used in degreasing	Carbon tetrachloride Tetrachloroethylene Trichloroethylene Trichloromonofluoromethane	Methylene chloride 1,1,1-Trichloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane
<input type="checkbox"/> F002 Spent halogenated solvents	Chlorobenzene Methylene chloride 1,1,1-Trichloroethane Trichloroethylene Trichloromonofluoromethane	<i>o</i> -Dichlorobenzene Tetrachloroethylene 1,1,2-Trichloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane
<input type="checkbox"/> F003 Spent non-halogenated solvents	Acetone Cyclohexanone* Ethyl benzene Methanol* Xylenes (total)	<i>n</i> -Butyl alcohol Ethyl acetate Ethyl ether Methyl isobutyl ketone
<input type="checkbox"/> F004 Spent non-halogenated solvents	<i>m</i> -Cresol <i>p</i> -Cresol Nitrobenzene	<i>o</i> -Cresol Cresol-mixed isomers (cresylic acid)
<input type="checkbox"/> F005 Spent non-halogenated solvents	Benzene 2-Ethoxyethanol Methyl ethyl ketone Pyridine	Carbon disulfide* Isobutyl alcohol 2-Nitropropane Toluene

*The treatment standards for carbon disulfide, cyclohexanone, and methanol nonwastewaters are based on the TCLP and apply to spent solvent nonwastewaters containing only one, two, or all three of these constituents. The treatment standards for these three constituents do not apply when any of the other F001-F005 constituents are present in the waste.

Hazardous Debris

- ☐ This shipment contains hazardous debris that will be treated to comply with the alternative treatment standards of 268.45 (e.g., macroencapsulation or at blasting).

(The definitions of "debris" and "hazardous debris" are in 40 CFR 268.2. Per 268.45, hazardous debris must be treated for each "contaminant subject to treatment." To determine these, look up the waste code in 268.40 and list the regulated hazardous constituents for each code.)

The contaminants subject to treatment for this debris are identified below:

<u>EPA Waste Code</u>	<u>Subcategory</u>	<u>Contaminants subject to treatment</u>	
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

**Rho Chem Corporation,
a wholly owned subsidiary of PHILIP SERVICES CORP.,
RCRA Land Disposal Restriction Notification Form UC**

Generator: SPACEX U.S. EPA I.D. #: CAR000191536

Profile #: _____ Manifest #: 000765335JJK

In accordance with 40 CFR 268.7(a), the underlying hazardous constituents must be addressed in this waste. Per 268.2(i), "underlying hazardous constituent means any constituent listed in 268.48, Table UTS—Universal Treatment Standard which can reasonably be expected to be present at the point of generation of hazardous waste, at a concentration above the constituent-specific UTS treatment standard. Refer to Form-EZ (attached) for the waste code(s), treatability, and subcategory applicable to this waste.

In order to address underlying hazardous constituents in characteristic wastes, please check the appropriate box:

- ☒ I have reviewed the UTS list of 268.48, and per 268.7(a), I have determined that there are no underlying hazardous constituents reasonably expected to be present in this waste.
- ☐ I have reviewed the UTS list of 268.48, and per 268.7(a), I have determined that underlying hazardous constituents are present in this waste. The underlying hazardous constituents are identified as follows:

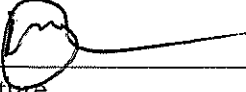
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

The determination of underlying hazardous constituents was based on:

- ☒ Generator's knowledge of the waste
- ☐ Analysis

I certify that I personally have examined and am familiar with the waste through analysis and testing, or through knowledge of the waste to support this certification. I certify that as an authorized representative of the generator named above, all the information submitted in this notification is true and correct to the best of my knowledge.

Mark Drey
Printed Name


Signature

07/24/09
Date

List of Underlying Hazardous Constituents 40 CFR 268.48

Circle or otherwise identify the underlying hazardous constituents present in the waste:

<u>Organic Constituent</u>	<u>Organic Constituent</u>	<u>Organic Constituent</u>	<u>Organic Constituent</u>
A2213	2-Chlorophenol	Ethyl acetate	Oxamyl
Acenaphthylene	3-Chloropropylene	Ethyl benzene	Parathion
Acenaphthene	Chrysene	Ethyl cyanide/Propanenitrile	Total PCBs(sum of all isomers, or all
Aroclors)			
Acetone	<i>o</i> -Cresol	Ethyl ether	Pebulate
Acetonitrile	<i>m</i> -Cresol	bis(2-Ethylhexyl)phthalate	Pentachlorobenzene
Acetophenone	<i>p</i> -Cresol	Ethyl methacrylate	PeCDDs(All Pentachlorodibenzo- <i>p</i> -dioxi
2-Acetylaminofluorene	<i>m</i> -Cumenyl methylcarbamate	Ethylene oxide	PeCDFs(All Pentachlorodibenzofurans)
Acrolein	Cyclohexanone	Famphur	Pentachloroethane
Acrylamide	<i>o,p'</i> -DDD	Fluoranthene	Pentachloronitrobenzene
Acrylonitrile	<i>p,p'</i> -DDD	Fluorene	Pentachlorophenol
Aldicarb sulfone	<i>o,p'</i> -DDE	Formetanate hydrochloride	Phenacetin
Aldrin	<i>p,p'</i> -DDE	Formparanate	Phenanthrene
4-Aminobiphenyl	<i>o,p'</i> -DDT	Heptachlor	Phenol
Aniline	<i>p,p'</i> -DDT	Heptachlor epoxide	<i>o</i> -Phenylenediamine
Anthracene	Dibenz(a,h)anthracene	Hexachlorobenzene	Phorate
Aramite	Dibenz(a,e)pyrene	Hexachlorobutadiene	Phthalic acid
alpha-BHC	1,2-Dibromo-3-chloropropane	Hexachlorocyclopentadiene	Phthalic anhydride
beta-BHC	1,2-Dibromoethane/Ethylene dibromide	HxCDDs(All Hexachlorodibenzo- <i>p</i> -dioxins)	Physostigmine
delta-BHC	Dibromomethane	HxCDFs(All Hexachlorodibenzofurans)	Physostigmine salicylate
gamma-BHC	<i>m</i> -Dichlorobenzene	Hexachloroethane	Promecarb
Barban	<i>o</i> -Dichlorobenzene	Hexachloropropylene	Pronamide
Bendiocarb	<i>p</i> -Dichlorobenzene	Indeno(1,2,3- <i>c,d</i>)pyrene	Propham
Bendiocarb phenol	Dichlorodifluoromethane	Iodomethane	Propoxur
Benomyl	1,1-Dichloroethane	Isobutyl alcohol	Prosulfocarb
Benzene	1,2-Dichloroethane	Isodrin	Pyrene
Benz(a)anthracene	1,1-Dichloroethylene	Isolan	Pyridine
Benzal chloride	<i>trans</i> -1,2-Dichloroethylene	Isosafrole	Safrole
Benzo(b)fluoranthene	2,4-Dichlorophenol	Kepone	Silvex/2,4,5-TP
Benzo(k)fluoranthene	2,6-Dichlorophenol	Methacrylonitrile	1,2,4,5-Tetrachlorobenzene
Benzo(g,h,i)perylene	2,4-Dichlorophenoxyacetic acid/2,4-D	Methanol	TCDDs(All Tetrachlorodibenzo- <i>p</i> -dioxin;
Benzo(a)pyrene	1,2-Dichloropropane	Methapyriline	TCDFs(All Tetrachlorodibenzofurans)
Bromodichloromethane	<i>cis</i> -1,3-Dichloropropylene	Methiocarb	1,1,1,2-Tetrachloroethane
Bromomethane/Methyl bromide	<i>trans</i> -1,3-Dichloropropylene	Methomyl	1,1,2,2-Tetrachloroethane
4-Bromophenyl phenyl ether	Dieldrin	Methoxychlor	Tetrachloroethylene
<i>n</i> -Butyl alcohol	Diethylene glycol, dicarbamate	3-Methylcholanthrene	2,3,4,6-Tetrachlorophenol
Butylate	Diethyl phthalate	4,4-Methylene-bis(2-chloroaniline)	Thiodicarb
Butyl benzyl phthalate	<i>p</i> -Dimethylaminoazobenzene	Methylene chloride	Thiophanate-methyl
2-sec-Butyl-4,6-dinitrophenol/Dinoseb	2,4-Dimethyl phenol	Methyl ethyl ketone	Tirpate
Carbaryl	Dimethyl phthalate	Methyl isobutyl ketone	Toluene
Carbenzadim	Dimetilan	Methyl methacrylate	Toxaphene
Carbofuran	Di- <i>n</i> -butyl phthalate	Methyl methansulfonate	Triallate
Carbofuran phenol	1,4-Dinitrobenzene	Methyl parathion	Tribromomethane/Bromoform
Carbon disulfide	4,6-Dinitro- <i>o</i> -cresol	Metolcarb	2,4,6-Tribromophenol
Carbon tetrachloride	2,4-Dinitrophenol	Mexacarbate	1,2,4-Trichlorobenzene
Carbosulfan	2,4-Dinitrotoluene	Molinate	1,1,1-Trichloroethane
Chlordane (alpha and gamma isomers)	2,6-Dinitrotoluene	Naphthalene	1,1,2-Trichloroethane
<i>p</i> -Chloroaniline	Di- <i>n</i> -octyl phthalate	2-Naphthylamine	Trichloroethylene
Chlorobenzene	Di- <i>n</i> -propylnitrosamine	<i>o</i> -Nitroaniline	Trichloromonofluoromethane
Chlorobenzilate	1,4-Dioxane	<i>p</i> -Nitroaniline	2,4,5-Trichlorophenol
2-Chloro-1,3-butadiene	Diphenylamine	Nitrobenzene	2,4,6-Trichlorophenol
Chlorodibromomethane	Diphenylnitrosamine	5-Nitro- <i>o</i> -toluidine	2,4,5-Trichlorophenoxyacetic acid/2,4,5-
Chloroethane	1,2-Diphenylhydrazine	<i>o</i> -Nitrophenol	1,2,3-Trichloropropane
bis(2-Chloroethoxy)methane	Disulfoton	<i>p</i> -Nitrophenol	1,1,2-Trichloro-1,2,2-trifluoroethane
bis(2-Chloroethyl)ether	Dithiocarbamates (total)	N-Nitrosodiethylamine	Triethylamine
Chloroform	Endosulfan I	N-Nitrosodimethylamine	tris-(2,3-Dibromopropyl)phosphate
bis(2-Chloroisopropyl)ether	Endosulfan II	N-Nitroso-di- <i>n</i> -butylamine	Vernolate
<i>p</i> -Chloro- <i>m</i> -cresol	Endosulfan sulfate	N-Nitrosomethylethylamine	Vinyl chloride
2-Chloroethyl vinyl ether	Endrin	N-Nitrosomorpholine	Xylenes-mixed isomers
Chloromethane/Methyl chloride concentrations)	Endrin aldehyde	N-Nitrosopiperidine	(sum of <i>o</i> -, <i>m</i> -, and <i>p</i> -xylene
2-Chloronaphthalene	EPTC	N-Nitrosopyrrolidine	
<u>Inorganic Constituent</u>	<u>Inorganic Constituent</u>	<u>Inorganic Constituent</u>	<u>Inorganic Constituent</u>
Antimony	Cadmium	Lead	Silver
Arsenic	Chromium (Total)	Mercury-Nonwastewater from Retort	Sulfides
Barium	Cyanides (Total)	Mercury-All Others	Thallium
Beryllium	Cyanides (Amenable)	Nickel	

Siemens Water Technologies Corp.

LAND DISPOSAL RESTRICTION NOTIFICATION FORM

Pursuant to CCR Title 22, Section 66268.7(40 CFR 268.7(a), I hereby notify that this waste shipment contains one or more of the following wastes restricted under the land disposal restrictions for which applicable treatment standards are set forth in CCR Title 22, Section 66268.40 (40 CFR 268.40)

Manifest Num.000765359 JJK Generator Name : SPACEX EPA# CAR000191536						
RCRA HAZARDOUS WASTE INFORMATION						
U.S.F. PROFILE NUMBER/ MANIFEST LINE ITEM NUMBER	List all D, F, K, U & P Codes	Subcategory (IF ANY)	WASTEWATER*/ NONWASTEWATER WW NWW		California List ** Per CCR Title 22, Section 66268.32	Hazardous Debris Subject To CCR Title 22, Sec 66268.45
1) 35072847				X	<input type="checkbox"/> For: _____	<input type="checkbox"/>
					<input type="checkbox"/> For: _____	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>

ADDITIONAL INFORMATION FOR D001, D002, D012-43, F001-5 & F039 WASTE STREAMS: (check one)

☒ There are no underlying hazardous constituents (UHCs) present

☐ There are underlying hazardous constituents (UHCs) present which do not meet treatment standards per CCR Title 22, Section 66268.48
(Use the attached UTS Table and check the appropriate constituent(s) present in the waste stream)

DETERMINATION BASED UPON : (check one)

☒ Knowledge of the process generating the waste and the raw materials used and the reaction products

☐ Results from analytical testing Analytical results attached ☐ YES ☒ NO

TERM DEFINITIONS:

* **WASTEWATER** = per CCR Title 22, Section 66260.10, WASTE THAT CONTAINS LESS THAN 1% BY WEIGHT TOTAL TOXIC ORGANICS (TOCs) AND 1% BY WEIGHT TOTAL SUSPENDED SOLIDS (TSS).

* **CALIFORNIA LIST**= THE FOLLOWING HAZARDOUS WASTES ARE PROHIBITED FROM LAND DISPOSAL: per CCR Title 22, Section 66268.32

- Liquid hazardous waste with a pH less than or equal to 2.0
- Liquid hazardous waste containing PCB's at concentration of greater than or equal to 50 ppm
- Liquid hazardous waste, including free liquids associated with any solids/sludge, containing free cyanide at concentrations greater than or equal to 1,000 mg/L
- Liquid hazardous waste, including free liquids associated with any solids/sludge, containing metals at concentrations greater than or equal to the following:

ARSENIC	500 mg/L	MERCURY	20 mg/L
CADMIUM	100 mg/L	NICKEL	134 mg/L
CHROMIUM	500 mg/L	SELENIUM	100 mg/L
LEAD	500 mg/L	THALLIUM	130 mg/L

- Liquid hazardous waste, that contains HOC's in total concentration greater than or equal to 1,000 mg/L
- Non-liquid RCRA hazardous waste containing HOC's in total concentration greater than or equal to 1,000 mg/L

CERTIFICATION

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification. I believe that the information I have submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment

SPACEX

COMPANY NAME	AUTHORIZED SIGNATURE	DATE
--------------	----------------------	------



FILE COPY
Pacific Resource Recovery

3150 East Pico Boulevard, Los Angeles, CA 90023
Phone (800) 499-7145 Fax (213) 780-0078

LAND DISPOSAL RESTRICTION NOTIFICATION

Manifest Line #	Approval #	Manifest Line #	Approval #	Manifest Line #	Approval #

This notification form shall be completed by the generator and shall accompany each shipment of restricted waste subject to the Land Disposal Restrictions (40 CFR 268 Subpart C).

- Complete all information in Section I.
- Check mark all appropriate Regulated Constituents in Section II, additional applicable Sections and/or complete Section III.
- Sign and date Section IV.

SECTION I								
GENERATOR'S NAME		Space Exploration Tech.						
EPA I.D. NUMBER		CAR000191536						
MANIFEST NUMBER		006078581 JJK						
TREATABILITY GROUP		(Check one) <input type="checkbox"/> Wastewater <input type="checkbox"/> Non-Wastewater						
HAZARDOUS DEBRIS		<input type="checkbox"/> Yes <input type="checkbox"/> No						
EPA HAZARDOUS WASTE CODE(S) -								
D001								
F005								
<input type="checkbox"/> There are no underlying hazardous constituents of concern, or								
<input type="checkbox"/> There are underlying hazardous constituents of concern which do not meet the treatment standards of 40 CFR 268.48, Table UTS - Universal Treatment Standards (see Section II).								
I have used the following to make the above determination:								
<input type="checkbox"/> Knowledge of the waste producing process, raw materials used and reaction products, or								
<input type="checkbox"/> Results of analysis for the constituents in Table UTS.								
Waste analysis data attached? <input type="checkbox"/> Yes <input type="checkbox"/> No								

NON-RCRA WASTE <input type="checkbox"/> LIQUID <input type="checkbox"/> SOLID Effective 1/31/96 - Pursuant to Section 25179.6 of the Health and Safety Code, NON-RCRA aqueous and solid waste containing organics has been repealed from Land Disposal Restriction Notification requirements.	(Check all that apply) <input type="checkbox"/> 11a <input type="checkbox"/> 11b <input type="checkbox"/> 11c <input type="checkbox"/> 11d <input type="checkbox"/> other (28a - 28i) <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>										

UNIVERSAL TREATMENT STANDARDS

SECTION II
<p>The Underlying Hazardous Constituents must be identified for waste streams which carry the EPA Waste Codes F001-F005, F039, D001 (only D001 not treated by RORGS; CMBST or POLYM), D005-D043 (only D005-D043 if treated in Non-CWA, Non-CWA equivalent or Non-SDWA facilities).</p> <p>The wastes identified on the aforementioned manifest document number and bearing the EPA Hazardous Waste Number(s) identified in Section I are subject to the Land Disposal Restrictions of 40 CFR 268 Subpart C. The wastes do not meet the applicable treatment standards specified in 40 CFR 268 Subpart D or exceeds the applicable prohibition levels specified in 40 CFR 268.32 (California list wastes) or RCRA Section 3004(d). In compliance with the requirements of 40 CFR 268.7 and 268.9 we are indicating below the applicable constituents of concern.</p>



ADDITIONAL RESTRICTED WASTE IDENTIFICATION/ TREATMENT STANDARDS AND CERTIFICATION FORM

[illegible]

Company Name: Space Exploration Tech.

Authorized Signature: _____

Printed Name: _____

Date: 10/7/09

40 CFR 268.48 TABLE UTS – UNIVERSAL TREATMENT STANDARDS (Continued)

¹CAS means Chemical Abstract Services. When the waste code and/or regulated constituents are described as a combination of a chemical with its salts and/or esters, the CAS number is given for the parent compound only.

²Concentration standards for wastewaters are expressed in mg/l are based on analysis of composite samples.

³Except for Cyanides (Total and Amenable) the non-wastewater treatment standards expressed as a concentration were established, in part, based upon incineration in units operated in accordance with the technical requirements of 40 CFR part 264, subpart 0 or 40 CFR part 265, subpart 0, or based upon combustion in fuel substitution units operating in accordance with applicable technical requirements. A facility may comply with these treatments standards according to provisions in 40 CFR 268.40(d). All concentration standards for nonwastewaters are based on analysis of grab samples.

⁴Both Cyanides (Total) and Cyanides (Amenable) for non-wastewaters are to be analyzed using Method 9010 or 9012, found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication SW-845, as incorporated by reference in 40 CFR 260.11, with a sample size of 10 grams and a distillation time of one hour and 15 minutes.

⁵These constituents are not "underlying hazardous constituents" in characteristic wastes, according to the definition at §268.2 (l).

⁶Between August 26, 1996, and August 26, 1997, these constituents are not "underlying hazardous constituents" as defined at §268.2 (i) of this Part. Note: NA means not applicable.

Please complete as applicable:

Wastes with organic constituents having treatment standards expressed as concentration levels based in whole or in part on the analytical detection limit alternative specified in §268.40(d).

- ☐ I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the non-wastewater organic constituents have been treated by combustion units as specified in 268.42, Table 1. I have been unable to detect the non-wastewater organic constituents, despite having used best good-faith efforts to analyze for such constituents. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

Wastes with treatment standards expressed as concentrations in the waste extract Toxicity Characteristic Leaching Procedure (TCLP).

- ☐ I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the treatment standards specified in 40 CFR 268.40 without impermissible dilution of the prohibited waste. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

☐ Alternative Treatment Standard Lab Pack

Manifest Line No.

--	--	--	--	--	--

- ☐ I certify under penalty of law that I personally have examined and am familiar with the waste and that the lab pack contains only wastes that have not been excluded under Appendix IV to 40 CFR Part 268 and that this lab pack will be sent to a combustion facility in compliance with the alternative treatment standards for lab packs at 40 CFR 268.42(c). I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment.

- ☐ I hereby certify under penalty of law that there are no PCBs (polychlorinated biphenyls) contained in the oil waste being manifested to Pacific Resource Recovery. I also understand that a sample of the load will be retained and that the generator will be responsible for the clean-up of contaminated equipment, tanks, etc. if PCBs are present in the waste.

Benzene NESHAP Control Requirement:

For Chemical Manufacturers, Petroleum Refineries, Coke By-Product Facilities and RCRA TSDFs handling wastes subject to 40 CFR 61 subpart FF ONLY:

- ☐ This waste is a "Controlled Benzene Waste" which is subject to the notification requirements of 40 CFR 61 Subpart FF.

Manifest Line No.

--	--	--	--	--	--

California List Wastes:

- ☐ Liquid hazardous wastes having a pH less than or equal to 2.0
- ☐ Liquid hazardous wastes containing PCBs at a concentration greater than or equal to 50 ppm
- ☐ Liquid hazardous wastes that contain HOCs in total concentration greater than or equal to 1000 mg/l
- ☐ Nonliquid hazardous wastes containing HOCs in total concentration greater than or equal to 1000 mg/kg
- ☐ Free (amenable to chlorination) cyanides greater than or equal to 1000 mg/l
- ☐ One or more of the following metals greater than or equal to the following:
- Arsenic and/or compounds: 500 mg/l
 - Cadmium and/or compounds: 100 mg/l
 - Chromium and/or compounds: 500 mg/l
 - Lead and/or compounds: 500 mg/l
 - Mercury and/or compounds: 20 mg/l
 - Nickel and/or compounds: 134 mg/l
 - Selenium and/or compounds: 100 mg/l
 - Thallium and/or compounds: 130 mg/l

40 CFR 268.48 TABLE UTS - UNIVERSAL TREATMENT STANDARDS (Continued)

Regulated constituent - common name	CAS ¹ NO.	Wastewater standard concentration in mg/l ²	Non-wastewater standard concentration in mg/l ² unless noted as "mg/l TCLP"	Regulated constituent - common name	CAS ¹ NO.	Wastewater standard concentration in mg/l ²	Non-wastewater standard concentration in mg/l ² unless noted as "mg/l TCLP"	Regulated constituent - common name	CAS ¹ NO.	Wastewater standard concentration in mg/l ²	Non-wastewater standard concentration in mg/l ² unless noted as "mg/l TCLP"
□ Acenaphthylene	208-96-6	0.059	3.4	□ m-Dichlorobenzene	541-73-1	0.036	6	□ p-Nitroaniline	100-01-6	0.028	28
□ Acenaphthene	83-32-9	0.059	3.4	□ o-Dichlorobenzene	95-50-1	0.088	6	□ o-Nitroaniline	88-74-4	0.27	14
□ Acetone	67-64-1	0.28	160	□ p-Dichlorobenzene	106-46-7	0.090	6	□ Nitrobenzene	98-95-3	0.068	14
□ Acetonitrile	75-05-8	5.6	1.8	□ Dichlorodifluoromethane	75-71-8	0.23	7.2	□ 5-Nitro-o-toluidine	99-55-6	0.32	28
□ Acetophenone	96-86-2	0.010	9.7	□ 1,1-Dichloroethane	75-34-3	0.059	6	□ o-Nitrophenol	88-75-5	0.28	13
□ 2-Acetylaminofluorene	53-96-3	0.059	140	□ 1,2-Dichloroethane	107-06-2	0.21	6	□ p-Nitrophenol	100-02-7	0.12	29
□ Acrolein	107-02-8	0.29	NA	□ 1,1-Dichloroethylene	75-34-4	0.025	5	□ N-Nitrosodimethylamine	55-18-5	0.40	28
□ Acrylamide	79-06-1	19	23	□ trans-1,2-Dichloroethylene	156-60-5	0.054	30	□ N-Nitrosodimethylamine	62-75-9	0.40	2.3
□ Acrylonitrile	107-13-1	0.24	84	□ 2,4-Dichlorophenol	120-83-2	0.044	14	□ N-Nitroso-di-n-butylamine	924-18-3	0.40	17
□ Aldrin	309-00-2	0.021	0.066	□ 2,6-Dichlorophenol	87-65-0	0.044	14	□ N-Nitrosomethylethylamine	10595-85-6	0.40	2.3
□ 4-Aminobiphenyl	92-87-1	0.13	NA	□ 1,2-Dichloropropane	78-87-5	0.65	18	□ N-Nitrosomorpholine	59-89-2	0.40	2.3
□ Aniline	62-53-3	0.81	14	□ cis-1,3-Dichloropropylene	10061-01-5	0.038	18	□ N-Nitrosopiperidine	100-75-4	0.013	35
□ Anthracene	120-12-7	0.059	3.4	□ trans-1,3-Dichloropropylene	10061-02-6	0.038	18	□ N-Nitrosopyrrolidine	930-55-2	0.013	35
□ Arsenite	140-57-8	0.36	NA	□ Dieldrin	80-57-1	0.017	0.13	□ Parathion	56-38-2	0.014	4.6
□ Alpha-BHC	319-84-6	0.00014	0.066	□ Diethyl phthalate	84-66-2	0.20	28	□ Pentachlorobenzene	608-93-5	0.055	10
□ beta-BHC	319-85-7	0.00014	0.066	□ p-Dimethylaminobenzene	60-11-7	0.13	NA	□ Pentachlorodibenzo-furans	NA	0.000035	0.001
□ Delta-BHC	319-86-6	0.023	0.066	□ 2,4-Dimethyl phenol	105-67-9	0.036	14	□ Pentachlorodibenzo-p-dioxins	NA	0.000063	0.001
□ gamma-BHC	58-69-9	0.0017	0.066	□ Dimethyl phthalate	131-11-3	0.047	28	□ Pentachloroethane	78-01-7	0.053	6
□ Benz(a)anthracene	58-55-3	0.059	3.4	□ Di-n-butyl phthalate	84-74-2	0.057	28	□ Pentachloronitrobenzene	82-66-8	0.055	4.8
□ Benzal chloride	98-87-3	0.055	6.0	□ 1,4-Dinitrobenzene	100-25-4	0.32	2.3	□ Pentachlorophenol	87-86-5	0.089	7.4
□ Benzene	71-43-2	0.14	10	□ 4,6-Dinitro-o-cresol	534-52-1	0.28	180	□ Phenacetin	82-44-2	0.061	16
□ Benzo(a)pyrene	50-32-8	0.061	3.4	□ 2,4-Dinitrophenol	51-28-5	0.12	160	□ Phenanthrene	85-01-8	0.059	3.6
□ Benzo(b)fluoranthene	205-99-2	0.11	6.8	□ 2,4-Dinitrotoluene	121-14-2	0.32	140	□ Phenol	108-95-2	0.039	6.2
□ Benzo(g,h,i)perylene	191-24-2	0.0055	1.8	□ 2,6-Dinitrotoluene	806-20-2	0.55	28	□ Phosphate	298-02-2	0.021	4.6
□ Benzo(k)fluoranthene	207-08-9	0.11	6.8	□ Di-n-octyl phthalate	117-84-0	0.017	28	□ Phthalic acid	100-21-0	0.055	28
□ bis-(2-Chloroethoxy) methane	111-91-1	0.036	7.2	□ Di-n-propyl nitrosamine	621-64-7	0.40	14	□ Phthalic anhydride	85-44-3	0.065	28
□ bis-(2-Chloroethyl) ether	111-44-4	0.033	6.0	□ Diphenylamine	122-39-4	0.92	13	□ Pronamide	23950-58-5	0.093	1.5
□ bis-(Chloroisopropyl) ether	106-60-1	0.055	7.2	□ 1,2-Diphenylhydrazine	122-66-7	0.087	NA	□ Propanenitrile (Ethyl cyanide)	107-12-0	0.24	360
□ bis-(Ethylhexyl) phthalate	117-81-7	0.28	28	□ Diphenylnitrosamine	86-30-6	0.92	13	□ Pyrene	129-00-0	0.067	8.2
□ Bromodichloromethane	75-27-4	0.35	15	□ 1,4-Dioxane	123-91-1	NA	170	□ Pyridine	110-86-1	0.014	16
□ Bromomethane (methyl bromide)	74-83-9	0.11	15	□ p-Dimethylaminobenzene	60-11-7	0.13	NA	□ Saffrole	94-59-7	0.081	22
□ 4-Bromophenyl phenyl ether	101-53-3	0.055	15	□ Disulfur	298-04-4	0.017	6.2	□ Silver (2,4,5-TP)	93-72-1	0.72	7.9
□ n-Butyl alcohol	71-36-3	5.6	2.6	□ Endosulfan I	999-98-8	0.023	0.066	□ 2,4,5-T	93-76-6	0.72	7.9
□ t-Butyl benzyl phthalate	85-68-7	0.017	28	□ Endosulfan II	33213-6-5	0.029	0.13	□ 1,2,4,5-Tetrachlorobenzene	95-94-3	0.095	14
□ 2-sec-Butyl-4,6-dinitrophenol dioxan	86-85-7	0.066	2.5	□ Endosulfan sulfate	1-31-07-8	0.029	0.13	□ Tetrachlorodibenzo-furans	NA	0.000063	0.001
□ Carbon disulfide	75-15-0	3.8	4.8 TCLP	□ Endrin	72-20-8	0.0028	0.13	□ Tetrachlorodibenzo-p-dioxins	NA	0.000063	0.001
□ Carbon tetrachloride	56-23-5	0.057	6.0	□ Endrin aldehyde	7421-93-4	0.025	0.13	□ 1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
□ Chlordane (alpha & gamma isomers)	57-74-9	0.0033	0.26	□ Ethyl acetate	141-78-6	0.34	33	□ 1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
□ p-Chloroaniline	106-47-8	0.46	16	□ Ethyl benzene	100-41-4	0.037	10	□ Tetrachloroethylene	127-18-4	0.056	6.0
□ Chlorobenzene	108-90-7	0.057	6.0	□ Ethyl ether	60-29-7	0.12	160	□ 2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
□ Chlorobenzilate	510-15-6	0.10	NA	□ Ethyl methacrylate	97-83-2	0.14	160	□ Toluene	106-88-3	0.080	10
□ 2-Chloro-1,3-butadiene	128-99-8	0.057	0.28	□ Ethylene oxide	75-21-8	0.12	NA	□ Toxaphene	8001-35-2	0.0095	2.6
□ Chlorodibromomethane	124-48-1	0.057	15	□ Fampur	52-85-7	0.017	15	□ Tribromomethane (bromoform)	75-25-2	0.63	15
□ Chloroethane	75-00-3	0.27	6.0	□ Fluoranthene	206-44-0	0.068	3.4	□ 1,2,4-Trichlorobenzene	120-82-1	0.055	19
□ Chloroform	67-68-3	0.046	6.0	□ Fluorene	86-73-7	0.059	3.4	□ 1,1,1-Trichloroethane	71-55-6	0.054	6.0
□ p-Chloro-m-cresol	59-50-7	0.018	14	□ Heptachlor	76-44-8	0.0012	0.066	□ 1,1,2-Trichloroethane	79-00-5	0.054	6.0
□ 2-Chloroethyl vinyl ether	110-75-8	0.062	NA	□ Heptachlor epoxide	1024-57-3	0.016	0.066	□ Trichloroethylene	79-01-6	0.054	6.0
□ Chloromethane (methyl chloride)	74-87-3	0.19	30	□ Hexachlorobenzene	118-74-1	0.055	10	□ Trichloromonoethoxymethane	75-89-4	0.020	30
□ 2-Chloronaphthalene	91-3-7	0.055	5.6	□ Hexachlorobutadiene	67-68-3	0.055	5.6	□ 2,4,5-Trichlorophenol	95-95-4	0.18	7.4
□ 2-Chlorophenol	95-57-8	0.044	5.7	□ Hexachlorodibenzo-furans	NA	0.000063	0.001	□ 2,4,6-Trichlorophenol	88-06-2	0.035	7.4
□ 3-Chloropropylene	107-05-1	0.036	30	□ Hexachlorodibenzo-p-dioxins	NA	0.000063	0.001	□ 1,2,3-Trichloropropane	96-18-4	0.85	30
□ Chrysene	218-01-9	0.059	3.4	□ Hexachlorocyclopentadiene	77-47-4	0.057	2.4	□ 1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.057	30
□ p-Cresol	106-44-5	0.77	5.6	□ Hexachloroethane	67-72-1	0.055	30	□ Vinyl chloride	75-01-4	0.27	6.0
□ m-Cresol	106-39-4	0.77	5.6	□ Hexachloropropylene	1868-71-7	0.035	30	□ Xylenes (total)	1330-20-7	0.32	30
□ o-Cresol	95-48-7	0.11	5.6	□ Indene (1,2,3-c,d)pyrene	193-39-5	0.0055	3.4	□ Total PCBs	1336-36-3	0.1	10
□ Cyclohexanone	106-84-1	0.36	0.75 TCLP	□ Iodomethane	74-84-4	0.19	85	□ Antimony	7440-36-0	1.9	0.07 TCLP
□ 2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	0.72	10	□ Isobutyl alcohol	78-83-1	5.6	170	□ Arsenic	7440-38-2	1.4	5.0 TCLP
□ o,p'-DDD	53-19-0	0.023	0.087	□ Isodrin	465-73-6	0.021	0.066	□ Barium	7440-39-3	1.2	21 TCLP
□ p,p'-DDD	72-54-8	0.023	0.087	□ Isosafrole	120-58-1	0.081	2.6	□ Beryllium	7440-41-7	0.82	0.02 TCLP
□ o,p'-DDE	3424-82-8	0.031	0.087	□ Kapone	143-50-8	0.0011	0.13	□ Cadmium	7440-43-9	0.69	0.2 TCLP
□ p,p'-DDE	72-55-9	0.031	0.087	□ Methacrylonitrile	128-98-7	0.24	64	□ Chromium (total)	7440-47-3	2.77	0.85 TCLP
□ o,p'-DDT	789-02-6	0.0039	0.087	□ Methanol	67-58-1	5.6	0.75 TCLP	□ Cyanide (total)	57-12-5	1.2	580*
□ p,p'-DDT	50-29-3	0.0039	0.087	□ Methapyrene	91-80-5	0.081	1.5	□ Cyanide (amenable)	57-12-5	0.86	30*
□ Dibenzo(a,e)pyrene	192-85-4	0.061	NA	□ Methoxychlor	72-43-5	0.25	0.18	□ Fluoride	16984-48-3	35	NA
□ Dibenzo(a,h)anthracene	53-70-3	0.055	8.2	□ 3-Methylcholanthrene	56-49-5	0.0055	15	□ Lead	7439-92-1	0.69	0.75 TCLP
□ Tris-(2,3-Dibromopropyl) phosphate	128-72-7	0.11	0.10	□ 4,4-Methylene-bis-(2-chloroaniline)	101-14-4	0.50	30	□ Mercury - NWW from Retort	7439-97-6	0.15	0.20 TCLP
□ 1,2-Dibromo-3-Chloropropane	96-12-8	0.11	15	□ Methylene chloride	75-09-2	0.089	30	□ Mercury - all others	7439-97-6	0.15	0.025 TCLP
□ 1,2-Dibromomethane (ethylene dibromide)	106-93-4	0.028	15	□ Methyl ethyl ketone	78-93-3	0.28	36	□ Nickel	7440-02-0	3.98	13.8 TCLP
□ Dibromomethane	74-95-3	0.11	15	□ Methyl isobutyl ketone	108-10-1	0.14	33	□ Selenium*	7782-49-2	0.82	5.7 TCLP
				□ Methyl methacrylate	60-82-6	0.14	160	□ Silver	7440-22-4	0.43	0.11 TCLP
				□ Methyl methanesulfonate	66-27-3	0.018	NA	□ Sulfide	8496-25-8	14.0	NA
				□ Methyl Parathion	298-00-0	0.014	4.6	□ Thallium	7440-28-0	1.4	0.20 TCLP
				□ Naphthalene	91-20-3	0.059	5.6	□ Vanadium*	7440-62-2	4.3	1.8 TCLP
				□ 2-Naphthylamine	91-59-8	0.52	NA	□ Zinc*	7440-66-6	2.61	4.3 TCLP

LAND DISPOSAL RESTRICTION NOTIFICATION FORM

Pursuant to CCR Title 22, Section 66268.7(40 CFR 268.7(a), I hereby notify that this waste shipment contains one or more of the following wastes restricted under the land disposal restrictions for which applicable treatment standards are set forth in CCR Title 22, Section 66268.40 (40 CFR 268.40)

Manifest Num# 006078583JJK Generator Name : SPACE EXPLORATION EPA# CAR000191536																						
RCRA HAZARDOUS WASTE INFORMATION																						
U.S.F. PROFILE NUMBER/ MANIFEST LINE ITEM NUMBER	List all D, F, K, U & P Codes	Subcategory (IF ANY)	WASTEWATER*/ NONWASTEWATER WW NWW		California List ** Per CCR Title 22, Section 66268.32	Hazardous Debris Subject To CCR Title 22, Sec 66268.45																
1)P179098	D002, D007		X	<input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>																
2)AP169389	D007		<input type="checkbox"/>	X	<input type="checkbox"/> For: _____	<input type="checkbox"/>																
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>																
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>																
ADDITIONAL INFORMATION FOR D001, D002, D012-43, F001-5 & F039 WASTE STREAMS: (check one)																						
<input checked="" type="checkbox"/> There are no underlying hazardous constituents (UHCs) present																						
<input type="checkbox"/> There are underlying hazardous constituents (UHCs) present which do not meet treatment standards per CCR Title 22, Section 66268.48 (Use the attached UTS Table and check the appropriate constituent(s) present in the waste stream)																						
DETERMINATION BASED UPON : (check one)																						
<input checked="" type="checkbox"/> Knowledge of the process generating the waste and the raw materials used and the reaction products																						
<input type="checkbox"/> Results from analytical testing Analytical results attached <input type="checkbox"/> YES <input type="checkbox"/> NO																						
-																						
TERM DEFINITIONS:																						
* WASTEWATER = per CCR Title 22, Section 66260.10, WASTE THAT CONTAINS LESS THAN 1% BY WEIGHT TOTAL TOXIC ORGANICS (TOCs) AND 1% BY WEIGHT TOTAL SUSPENDED SOLIDS (TSS).																						
* CALIFORNIA LIST= THE FOLLOWING HAZARDOUS WASTES ARE PROHIBITED FROM LAND DISPOSAL: per CCR Title 22, Section 66268.32																						
<ul style="list-style-type: none"> • Liquid hazardous waste with a pH less than or equal to 2.0 • Liquid hazardous waste containing PCB's at concentration of greater than or equal to 50 ppm • Liquid hazardous waste, including free liquids associated with any solids/sludge, containing free cyanide at concentrations greater than or equal to 1,000 mg/L • Liquid hazardous waste, including free liquids associated with any solids/sludge, containing metals at concentrations greater than or equal to the following: <table border="1" style="width: 100%; margin-top: 5px;"> <tr> <td style="text-align: left;">ARSENIC</td> <td style="text-align: center;">500 mg/L</td> <td style="text-align: left;">MERCURY</td> <td style="text-align: center;">20 mg/L</td> </tr> <tr> <td style="text-align: left;">CADIUM</td> <td style="text-align: center;">100 mg/L</td> <td style="text-align: left;">NICKEL</td> <td style="text-align: center;">134 mg/L</td> </tr> <tr> <td style="text-align: left;">CHROMIUM</td> <td style="text-align: center;">500 mg/L</td> <td style="text-align: left;">SELENIUM</td> <td style="text-align: center;">100 mg/L</td> </tr> <tr> <td style="text-align: left;">LEAD</td> <td style="text-align: center;">500 mg/L</td> <td style="text-align: left;">THALLIUM</td> <td style="text-align: center;">130 mg/L</td> </tr> </table> • Liquid hazardous waste, that contains HOC's in total concentration greater than or equal to 1,000 mg/L • Non-liquid RCRA hazardous waste containing HOC's in total concentration greater than or equal to 1,000 mg/L 							ARSENIC	500 mg/L	MERCURY	20 mg/L	CADIUM	100 mg/L	NICKEL	134 mg/L	CHROMIUM	500 mg/L	SELENIUM	100 mg/L	LEAD	500 mg/L	THALLIUM	130 mg/L
ARSENIC	500 mg/L	MERCURY	20 mg/L																			
CADIUM	100 mg/L	NICKEL	134 mg/L																			
CHROMIUM	500 mg/L	SELENIUM	100 mg/L																			
LEAD	500 mg/L	THALLIUM	130 mg/L																			
CERTIFICATION																						
I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification. I believe that the information I have submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment																						
SPACE EXPLORATION						10/07/09																
COMPANY NAME		AUTHORIZED SIGNATURE			DATE																	

FILE COPY

LAND DISPOSAL RESTRICTION NOTIFICATION FORM

Manifest Num# 000765434JJK Generator Name : SPACE_EXPLORATION EPA# CAR000191536

U.S.F. PROFILE NUMBER/ MANIFEST LINE ITEM NUMBER	List all D, F, K, U & P Codes	Subcategory (IF ANY)	WASTEWATER*/ NONWASTEWATER WW NWW		California List ** Per CCR Title 22, Section 66268.32	Hazardous Debris Subject To CCR Title 22, Sec 66268.45
1)AP169389	D007		<input type="checkbox"/>	X	<input type="checkbox"/> For: _____	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>

FILE COPY

Siemens Water Technologies Corp.

LAND DISPOSAL RESTRICTION NOTIFICATION FORM

Pursuant to CCR Title 22, Section 66268.7(40 CFR 268.7(a), I hereby notify that this waste shipment contains one or more of the following wastes restricted under the land disposal restrictions for which applicable treatment standards are set forth in CCR Title 22, Section 66268.40 (40 CFR 268.40)

Manifest Num# 000765448 Generator Name : SPACE EX EPA# CAR000191536						
RCRA HAZARDOUS WASTE INFORMATION						
U.S.F. PROFILE NUMBER/ MANIFEST LINE ITEM NUMBER	List all D, F, K, U & P Codes	Subcategory (IF ANY)	WASTEWATER*/ NONWASTEWATER WW NWW		California List ** Per CCR Title 22, Section 66268.32	Hazardous Debris Subject To CCR Title 22, Sec 66268.45
1)AP169389	D007		<input type="checkbox"/>	X	<input type="checkbox"/> For: _____	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>

ADDITIONAL INFORMATION FOR D001, D002, D012-43, F001-5 & F039 WASTE STREAMS: (check one)

☒ There are no underlying hazardous constituents (UHCs) present

☐ There are underlying hazardous constituents (UHCs) present which do not meet treatment standards per CCR Title 22, Section 66268.48
(Use the attached UTS Table and check the appropriate constituent(s) present in the waste stream)

DETERMINATION BASED UPON : (check one)

☒ Knowledge of the process generating the waste and the raw materials used and the reaction products

☐ Results from analytical testing Analytical results attached ☐ YES ☐ NO

TERM DEFINITIONS:

* **WASTEWATER** = per CCR Title 22, Section 66260.10, WASTE THAT CONTAINS LESS THAN 1% BY WEIGHT TOTAL TOXIC ORGANICS (TOCs) AND 1% BY WEIGHT TOTAL SUSPENDED SOLIDS (TSS).

* **CALIFORNIA LIST**= THE FOLLOWING HAZARDOUS WASTES ARE PROHIBITED FROM LAND DISPOSAL: per CCR Title 22, Section 66268.32

- Liquid hazardous waste with a pH less than or equal to 2.0
- Liquid hazardous waste containing PCB's at concentration of greater than or equal to 50 ppm
- Liquid hazardous waste, including free liquids associated with any solids/sludge, containing free cyanide at concentrations greater than or equal to 1,000 mg/L
- Liquid hazardous waste, including free liquids associated with any solids/sludge, containing metals at concentrations greater than or equal to the following:

ARSENIC	500 mg/L	MERCURY	20 mg/L
CADMIUM	100 mg/L	NICKEL	134 mg/L
CHROMIUM	500 mg/L	SELENIUM	100 mg/L
LEAD	500 mg/L	THALLIUM	130 mg/L

- Liquid hazardous waste, that contains HOC's in total concentration greater than or equal to 1,000 mg/L
- Non-liquid RCRA hazardous waste containing HOC's in total concentration greater than or equal to 1,000 mg/L

CERTIFICATION

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification. I believe that the information I have submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment

SPACE EX 10/29/09

COMPANY NAME	AUTHORIZED SIGNATURE	DATE
--------------	----------------------	------

FILE COPY



Pacific
Resource
Recovery

3150 East Pico Boulevard, Los Angeles, CA 90023
Phone (800) 499-7145 Fax (213) 780-0078

FILE COPY

LAND DISPOSAL RESTRICTION NOTIFICATION

Manifest Line #	Approval #	Manifest Line #	Approval #	Manifest Line #	Approval #

This notification form shall be completed by the generator and shall accompany each shipment of restricted waste subject to the Land Disposal Restrictions (40 CFR 268 Subpart C).

- Complete all information in Section I.
- Check mark all appropriate Regulated Constituents in Section II, additional applicable Sections and/or complete Section III.
- Sign and date Section IV.

SECTION I							
GENERATOR'S NAME		Space Exploration					
EPA I.D. NUMBER		CAR 000191536					
MANIFEST NUMBER		000765462 JJK					
TREATABILITY GROUP		(Check one) <input type="checkbox"/> Wastewater <input type="checkbox"/> Non-Wastewater					
HAZARDOUS DEBRIS		<input type="checkbox"/> Yes <input type="checkbox"/> No					
EPA HAZARDOUS WASTE CODE(S) -							
D001							
F005							
<input type="checkbox"/> There are no underlying hazardous constituents of concern, or							
<input type="checkbox"/> There are underlying hazardous constituents of concern which do not meet the treatment standards of 40 CFR 268.48, Table UTS - Universal Treatment Standards (see Section II).							
I have used the following to make the above determination:							
<input type="checkbox"/> Knowledge of the waste producing process, raw materials used and reaction products, or							
<input type="checkbox"/> Results of analysis for the constituents in Table UTS.							
Waste analysis data attached? <input type="checkbox"/> Yes <input type="checkbox"/> No							

NON-RCRA WASTE <input type="checkbox"/> LIQUID <input type="checkbox"/> SOLID Effective 1/31/96 - Pursuant to Section 25179.6 of the Health and Safety Code, NON-RCRA aqueous and solid waste containing organics has been repealed from Land Disposal Restriction Notification requirements.	(Check all that apply) <input type="checkbox"/> 11a <input type="checkbox"/> 11b <input type="checkbox"/> 11c <input type="checkbox"/> 11d <input type="checkbox"/> other (28a - 28i)
--	--

UNIVERSAL TREATMENT STANDARDS

SECTION II
<p>The Underlying Hazardous Constituents must be identified for waste streams which carry the EPA Waste Codes F001-F005, F039, D001 (only D001 not treated by RORGS; CMBST or POLYM), D005-D043 (only D005-D043 if treated in Non-CWA, Non-CWA equivalent or Non-SDWA facilities).</p> <p>The wastes identified on the aforementioned manifest document number and bearing the EPA Hazardous Waste Number(s) identified in Section I are subject to the Land Disposal Restrictions of 40 CFR 268 Subpart C. The wastes do not meet the applicable treatment standards specified in 40 CFR 268 Subpart D or exceeds the applicable prohibition levels specified in 40 CFR 268.32 (California list wastes) or RCRA Section 3004(d). In compliance with the requirements of 40 CFR 268.7 and 268.9 we are indicating below the applicable constituents of concern.</p>

ADDITIONAL RESTRICTED WASTE IDENTIFICATION/ TREATMENT STANDARDS AND CERTIFICATION FORM

Complete Section III if the restricted wastes (i.e., EPA Hazardous Waste Code) as listed in Section I do not meet the applicable treatment standards in 40 CFR 268.40 (Treatment Standards for Hazardous Wastes) and have not been identified as required in Section II.

[illegible]

I hereby certify that all information submitted in this and all associated documents is complete and accurate to the best of my knowledge and information.

Company Name: Space Exploration

Authorized Signature: _____

Printed Name: _____

Date: 11/5/09

40 CFR 268.48 TABLE UTS – UNIVERSAL TREATMENT STANDARDS (Continued)

¹CAS means Chemical Abstract Services. When the waste code and/or regulated constituents are described as a combination of a chemical with its salts and/or esters, the CAS number is given for the parent compound only.

²Concentration standards for wastewaters are expressed in mg/l are based on analysis of composite samples.

³Except for Cyanides (Total and Amenable) the non-wastewater treatment standards expressed as a concentration were established, in part, based upon incineration in units operated in accordance with the technical requirements of 40 CFR part 264, subpart 0 or 40 CFR part 265, subpart 0, or based upon combustion in fuel substitution units operating in accordance with applicable technical requirements. A facility may comply with these treatments standards according to provisions in 40 CFR 268.40(d). All concentration standards for nonwastewaters are based on analysis of grab samples.

⁴Both Cyanides (Total) and Cyanides (Amenable) for non-wastewaters are to be analyzed using Method 9010 or 9012, found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication SW-846, as incorporated by reference in 40 CFR 260.11, with a sample size of 10 grams and a distillation time of one hour and 15 minutes.

⁵These constituents are not "underlying hazardous constituents" in characteristic wastes, according to the definition at §268.2 (i).

⁶Between August 26, 1996, and August 26, 1997, these constituents are not "underlying hazardous constituents" as defined at §268.2 (i) of this Part. Note: NA means not applicable.

Please complete as applicable:

Wastes with organic constituents having treatment standards expressed as concentration levels based in whole or in part on the analytical detection limit alternative specified in §268.40(d).

- ☐ I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the non-wastewater organic constituents have been treated by combustion units as specified in 268.42, Table 1. I have been unable to detect the non-wastewater organic constituents, despite having used best good-faith efforts to analyze for such constituents. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

Wastes with treatment standards expressed as concentrations in the waste extract Toxicity Characteristic Leaching Procedure (TCLP).

- ☐ I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the treatment standards specified in 40 CFR 268.40 without impermissible dilution of the prohibited waste. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

☐ **Alternative Treatment Standard Lab Pack**

Manifest Line No.

--	--	--	--	--	--

- ☐ I certify under penalty of law that I personally have examined and am familiar with the waste and that the lab pack contains only wastes that have not been excluded under Appendix IV to 40 CFR Part 268 and that this lab pack will be sent to a combustion facility in compliance with the alternative treatment standards for lab packs at 40 CFR 268.42(c). I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment.

- ☐ I hereby certify under penalty of law that there are no PCBs (polychlorinated biphenyls) contained in the oil waste being manifested to Pacific Resource Recovery. I also understand that a sample of the load will be retained and that the generator will be responsible for the clean-up of contaminated equipment, tanks, etc. if PCBs are present in the waste.

Benzene NESHAP Control Requirement:

For Chemical Manufacturers, Petroleum Refineries, Coke By-Product Facilities and RCRA TSDFs handling wastes subject to 40 CFR 61 subpart FF ONLY:

- ☐ This waste is a "Controlled Benzene Waste" which is subject to the notification requirements of 40 CFR 61 Subpart FF.

Manifest Line No.

--	--	--	--	--	--

California List Wastes:

- ☐ Liquid hazardous wastes having a pH less than or equal to 2.0
- ☐ Liquid hazardous wastes containing PCBs at a concentration greater than or equal to 50 ppm
- ☐ Liquid hazardous wastes that contain HOCs in total concentration greater than or equal to 1000 mg/l
- ☐ Nonliquid hazardous wastes containing HOCs in total concentration greater than or equal to 1000 mg/kg
- ☐ Free (amenable to chlorination) cyanides greater than or equal to 1000 mg/l
- ☐ One or more of the following metals greater than or equal to the following:
- Arsenic and/or compounds: 500 mg/l
 - Cadmium and/or compounds: 100 mg/l
 - Chromium and/or compounds: 500 mg/l
 - Lead and/or compounds: 500 mg/l
 - Mercury and/or compounds: 20 mg/l
 - Nickel and/or compounds: 134 mg/l
 - Selenium and/or compounds: 100 mg/l
 - Thallium and/or compounds: 130 mg/l

40 CFR 268.48 TABLE UTS - UNIVERSAL TREATMENT STANDARDS (Continued)

Regulated constituent - common name	CAS NO.	Water-soluble standard concentration in mg/L	Non-water-soluble standard concentration in mg/kg unless noted as "mg/L TCLP"	Regulated constituent - common name	CAS NO.	Water-soluble standard concentration in mg/L	Non-water-soluble standard concentration in mg/kg unless noted as "mg/L TCLP"	Regulated constituent - common name	CAS NO.	Water-soluble standard concentration in mg/L	Non-water-soluble standard concentration in mg/kg unless noted as "mg/L TCLP"
Acenaphthylene	208-96-6	0.059	3.4	m-Dichlorobenzene	541-73-1	0.036	6	p-Nitroaniline	100-01-6	0.028	26
Acenaphthene	83-32-9	0.059	3.4	o-Dichlorobenzene	95-50-1	0.086	6	o-Nitroaniline	88-74-4	0.27	14
Acetone	67-64-1	0.28	160	p-Dichlorobenzene	106-46-7	0.090	6	Nitrobenzene	98-95-3	0.068	14
Acetonitrile	75-05-8	5.6	1.8	Dichlorodifluoromethane	75-71-8	0.23	7.2	5-Nitro-o-toluidine	99-55-8	0.32	26
Acetophenone	96-66-2	0.010	9.7	1,1-Dichloroethane	75-34-3	0.059	6	o-Nitrophenol	88-75-5	0.28	13
2-Acetylaminofluorene	53-96-3	0.059	140	1,2-Dichloroethane	107-06-2	0.21	6	p-Nitrophenol	100-02-7	0.12	29
Acrolein	107-02-8	0.29	NA	1,1-Dichloroethylene	75-34-4	0.025	6	N-Nitrosodimethylamine	55-18-5	0.40	26
Acrylamide	79-06-1	18	23	trans-1,2-Dichloroethylene	156-60-5	0.054	30	N-Nitrosodimethylamine	62-75-9	0.40	2.3
Acrylonitrile	107-13-1	0.24	84	2,4-Dichlorophenol	120-83-2	0.044	14	N-Nitroso-di-n-butylamine	924-18-3	0.40	17
Aldrin	309-00-2	0.021	0.066	2,6-Dichlorophenol	87-65-0	0.044	14	N-Nitrosomethylethylamine	10595-95-6	0.40	2.3
4-Aminobiphenyl	92-67-1	0.13	NA	1,2-Dichloropropane	78-87-5	0.65	18	N-Nitrosomorpholine	59-89-2	0.40	2.3
Aniline	62-53-3	0.81	14	cis-1,3-Dichloropropylene	10061-01-5	0.036	18	N-Nitrosopiperidine	100-75-4	0.013	35
Anthracene	120-12-7	0.059	3.4	trans-1,3-Dichloropropylene	10061-02-6	0.036	18	N-Nitrosopyrrolidine	930-55-2	0.013	35
Aramid	140-57-8	0.36	NA	Dieldrin	60-57-1	0.017	0.13	Parathion	56-38-2	0.014	4.6
alpha-BHC	319-84-6	0.00014	0.066	Diethyl phthalate	84-66-2	0.20	28	Pentachlorobenzene	608-93-5	0.055	10
beta-BHC	319-85-7	0.00014	0.066	p-Dimethylaminobenzene	80-11-7	0.13	NA	Pentachlorodibenzo-furans	NA	0.000035	0.001
delta-BHC	319-86-8	0.023	0.066	2,4-Dimethyl phenol	105-67-9	0.036	14	Pentachlorodibenzo-p-dioxins	NA	0.000063	0.001
gamma-BHC	58-89-8	0.0017	0.066	Dimethyl phthalate	131-11-3	0.047	28	Pentachloroethane	78-01-7	0.055	6
Benz(a)anthracene	56-55-3	0.059	3.4	Di-n-butyl phthalate	84-74-2	0.057	28	Pentachloronitrobenzene	82-68-8	0.055	4.6
Benzal chloride	98-87-3	0.055	6.0	1,4-Dinitrobenzene	100-25-4	0.32	2.3	Pentachlorophenol	87-86-5	0.069	7.4
Benzene	71-43-2	0.14	10	4,6-Dinitro-o-cresol	534-52-1	0.28	160	Phenacetin	82-44-2	0.081	16
Benzo(a)pyrene	50-32-8	0.061	3.4	2,4-Dinitrophenol	51-28-6	0.12	160	Phenanthrene	85-01-8	0.059	5.6
Benzo(b)fluoranthene	205-99-2	0.11	6.8	2,4-Dinitrotoluene	121-14-2	0.32	140	Phenol	108-95-2	0.039	6.2
Benzo(g,h,i)perylene	191-24-2	0.0055	1.8	2,6-Dinitrotoluene	808-20-2	0.55	28	Phorate	298-02-2	0.021	4.6
Benzo(k)fluoranthene	207-08-9	0.11	6.8	Di-n-octyl phthalate	117-84-0	0.017	28	Phthalic acid	100-21-0	0.055	28
bis-(2-Chloroethoxy) methane	111-91-1	0.036	7.2	Di-n-propyl nitrosamine	821-84-7	0.40	14	Phthalic anhydride	85-44-9	0.055	28
bis-(2-Chloroethyl) ether	111-44-4	0.033	6.0	Diphenylamine	122-66-7	0.087	NA	Pronamide	23950-58-5	0.093	1.5
bis-(Chloroisopropyl) ether	106-60-1	0.055	7.2	1,2-Diphenylhydrazine	122-66-7	0.087	NA	Propanenitrile (Ethyl cyanide)	107-12-0	0.24	360
bis-(Ethylhexyl) phthalate	117-81-7	0.28	28	Diphenylnitrosamine	86-30-6	0.92	13	Pyrene	129-00-0	0.067	8.2
Bromodichloromethane	75-27-4	0.35	15	1,4-Dioxane	123-91-1	NA	170	Pyridine	110-86-1	0.014	16
Bromomethane (methyl bromide)	74-83-9	0.11	15	p-Dimethylaminobenzene	80-11-7	0.13	NA	Safrin	94-59-7	0.081	22
4-Bromophenyl phenyl ether	101-55-3	0.055	15	Disulfoton	298-04-4	0.017	6.2	Silvex (2,4,5-TP)	93-72-1	0.72	7.9
n-Butyl alcohol	71-36-3	5.6	2.6	Endosulfan I	938-96-8	0.023	0.066	2,4,5-T	93-70-5	0.72	7.9
Butyl benzyl phthalate	85-68-7	0.017	28	Endosulfan II	33213-6-5	0.029	0.13	1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
2-sec-Butyl-4,6-dinitrophenol diacetate	88-85-7	0.066	2.5	Endosulfan sulfate	1-31-07-8	0.029	0.13	Tetrachlorodibenzo-furans	NA	0.000063	0.001
Carbon disulfide	75-15-0	3.8	4.8 TCLP	Endrin	72-20-8	0.0028	0.13	Tetrachlorodibenzo-p-dioxins	NA	0.000063	0.001
Carbon tetrachloride	56-23-5	0.057	6.0	Endrin aldehyde	7421-93-4	0.025	0.13	1,1,1,2-Tetrachloroethane	830-20-6	0.057	6.0
Chlordane (alpha & gamma isomers)	57-74-9	0.0033	0.26	Ethyl acetate	141-78-8	0.34	33	1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
p-Chloroaniline	106-47-8	0.46	16	Ethyl benzene	100-41-4	0.057	10	Tetrachloroethylene	127-18-4	0.056	6.0
Chlorobenzene	106-90-7	0.057	8.0	Ethyl ether	60-29-7	0.12	160	2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
Chlorobenzilate	510-15-6	0.10	NA	Ethyl methacrylate	97-83-2	0.14	160	Toluene	106-88-3	0.080	10
2-Chloro-1,3-butadiene	126-98-8	0.057	0.28	Ethylene oxide	75-21-8	0.12	NA	Toxaphene	8001-35-2	0.0095	2.6
Chlorodibromomethane	124-48-1	0.057	15	Famphur	52-85-7	0.017	15	Tribromomethane (bromofom)	75-25-2	0.63	15
Chloroethane	75-00-3	0.27	8.0	Fluoranthene	206-44-0	0.068	3.4	1,2,4-Trichlorobenzene	120-82-1	0.055	19
Chloroform	67-66-3	0.048	8.0	Fluorene	86-73-7	0.059	3.4	1,1,1-Trichloroethane	71-55-6	0.054	6.0
p-Chloro-m-cresol	59-50-7	0.018	14	Heptachlor	78-44-8	0.0012	0.066	1,1,2-Trichloroethane	79-00-5	0.054	6.0
2-Chloroethyl vinyl ether	110-75-8	0.062	NA	Heptachlor epoxide	1024-57-3	0.018	0.066	Trichloroethylene	79-01-6	0.054	6.0
Chloromethane (methyl chloride)	74-87-3	0.19	30	Hexachlorobenzene	118-74-1	0.055	10	Trichloromethoxyfluoromethane	75-89-4	0.020	30
2-Chloronaphthalene	91-8-7	0.055	5.6	Hexachlorobutadiene	67-68-3	0.055	5.6	2,4,5-Trichlorophenol	95-95-4	0.16	7.4
2-Chlorophenol	95-57-8	0.044	5.7	Hexachlorodibenzo-furans	NA	0.000063	0.001	2,4,6-Trichlorophenol	86-06-2	0.035	7.4
3-Chloropropylene	107-05-1	0.036	30	Hexachlorodibenzo-p-dioxins	NA	0.000063	0.001	1,2,3-Trichloropropane	96-18-4	0.85	30
Chrysene	218-01-9	0.059	3.4	Hexachlorocyclopentadiene	77-47-4	0.057	2.4	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.057	30
p-Cresol	106-44-5	0.77	5.6	Hexachloroethane	67-72-1	0.055	30	Vinyl chloride	75-01-4	0.27	6.0
m-Cresol	106-39-4	0.77	5.6	Hexachloropropylene	1856-71-7	0.035	30	Xylenes (total)	1330-20-7	0.32	30
o-Cresol	95-46-7	0.11	5.6	Indene (1,2,3-c,d)pyrene	193-39-5	0.0053	3.4	Total PCBs	1836-38-3	0.1	10
Cyclohexanone	106-94-1	0.36	0.75 TCLP	Iodmethane	74-88-4	0.19	65	Antimony	7440-36-0	1.9	0.07 TCLP
2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	0.72	10	Isobutyl alcohol	78-83-1	5.8	170	Arsenic	7440-38-2	1.4	5.0 TCLP
o,p'-DDD	53-19-0	0.023	0.087	Isodrin	465-73-6	0.021	0.066	Barium	7440-39-3	1.2	21 TCLP
p,p'-DDD	72-54-8	0.023	0.087	Isosafrole	120-55-1	0.051	2.5	Beryllium	7440-41-7	0.82	0.02 TCLP
o,p'-DDE	3424-82-6	0.031	0.087	Kapone	143-50-8	0.0011	0.13	Cadmium	7440-43-9	0.69	0.2 TCLP
p,p'-DDE	72-55-9	0.031	0.087	Methacrylonitrile	126-98-7	0.24	84	Chromium (total)	7440-47-3	2.77	0.85 TCLP
o,p'-DDT	709-02-8	0.0039	0.087	Methanol	67-56-1	5.6	0.75 TCLP	Cyanide (total)	57-12-5	1.2	590*
p,p'-DDT	50-29-3	0.0039	0.087	Methapyrene	91-80-5	0.081	1.5	Cyanide (amenable)	57-12-5	0.86	30*
Dibenz(a,e)pyrene	192-65-4	0.061	NA	Methoxychlor	72-43-5	0.25	0.18	Fluoride	16964-48-8	35	NA
Dibenz(a,h)anthracene	53-70-3	0.055	8.2	3-Methylchloanthrene	56-49-5	0.0055	15	Lead	7439-92-1	0.89	0.75 TCLP
Iris-(2,3-Dibromopropyl) phosphate	126-72-7	0.11	0.10	4,4-Methylene-bis-(2-chloroaniline)	101-14-4	0.50	30	Mercury - NWW from Retort	7439-97-6	0.15	0.20 TCLP
1,2-Dibromo-3-Chloropropane	96-12-8	0.11	15	Methylene chloride	75-09-2	0.089	30	Mercury - all others	7439-97-6	0.15	0.025 TCLP
1,2-Dibromomethane (ethylene dibromide)	106-93-4	0.028	15	Methyl ethyl ketone	78-93-3	0.28	36	Nickel	7440-02-0	3.58	13.8 TCLP
Dibromomethane	74-85-3	0.11	15	Methyl isobutyl ketone	108-10-1	0.14	33	Selenium*	7782-49-2	0.82	5.7 TCLP
				Methyl methacrylate	80-82-6	0.14	160	Silver	7440-22-4	0.43	0.11 TCLP
				Methyl methanesulfonate	66-27-3	0.018	NA	Sulfide	8496-25-8	14.0	NA
				Methyl Parathion	298-00-0	0.014	4.8	Thallium	7440-28-0	1.4	0.20 TCLP
				Naphthalene	91-20-3	0.059	5.6	Vanadium*	7440-62-2	4.3	1.8 TCLP
				2-Naphthylamine	91-59-8	0.52	NA	Zinc*	7440-66-8	2.61	4.3 TCLP



ADDRESS: 1 Rocket Rd. MANIFEST # 000765248JJh
Haltom, CA 90250

~~SEE INSTRUCTIONS (1,2,3 and 4)~~

Pursuant to CCR Title 22, Section 66268.7 (40 CFR 268.7), I hereby notify that this waste shipment contains one or more of the following wastes restricted under the land disposal restriction for which applicable treatment standards are set forth in CCR Title 22, Chapter 18, Land Disposal Restrictions:

[illegible]

IF NECESSARY USE A CONTINUATION PAGE

Page 1 of .

CERTIFICATION

I certify under penalty of law that I personally have examined and am familiar with the waste thorough analysis and testing, or through knowledge of the process generating the waste, to support this certification, I believe that the information that I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

Space Exploration
GENERATOR/ COMPANY NAME

4-16-00
DATE

De. R. on Behalf of SpaceX
AUTHORIZED SIGNATURE

Argceli Rodriguez CSR
PRINTED NAME/TITLE

if WASTE WATER (WW) Check to left		CUSTOMER: <i>Space Exploration</i>				WASTE APPROVAL # <i>315133</i>					
if WASTE WATER (WW) Check to left		WASTE NAME: <i>Flammable Liquids</i>				EPA # <i>CAB00019153L6</i>					
Check >	Regulated Constituent Common Name	WW Standard mg/l	NWW Standard mg/kg unless TCLP	Check >	Regulated Constituent Common Name	WW Standard mg/l	NWW Standard mg/kg unless TCLP	Check >	Regulated Constituent Common Name	WW Standard mg/l	NWW Standard mg/kg unless TCLP
001	Acenaphthylene	0.059	3.4 073	1-1 Dichloroethylene	0.025	6 145			5-Nitro-o-toluidine	0.32	28
002	Acenaphthene	0.059	3.4 074	trans-1,2-Dichloroethylene	0.054	30 146			o-Nitrophenol	0.028	13
003	Acetone	0.28	160 075	2,4-Dichlorophenol	0.044	14 147			p-Nitrophenol	0.12	29
004	Acetonitrile	5.6	38 076	2,6-Dichlorophenol	0.044	14 148			N-Nitrosodimethylamine	0.4	28
005	Acetophenone	0.01	9.7 077	2,4-Dichlorophenoxyacetic acid/2,4-D	0.72	10 149			N-Nitrosodimethylamine	0.4	2.3
006	2-Acetylaminofluorene	0.059	140 078	1,2-Dichloropropane	0.85	18 150			N-Nitroso-di-n-butylamine	0.4	17
007	Acrolein	0.29	NA 079	cis-1,3-Dichloropropylene	0.036	18 151			N-Nitrosomethylamine	0.4	2.3
008	Acrylamide	19	23 080	trans-1,3-Dichloropropylene	0.036	18 152			N-Nitrosomorpholine	0.4	2.3
009	Acrylonitrile	0.24	84 081	Diethrin	0.017	0.13 153			N-Nitrosopiperidine	0.013	35
010	Aldrin	0.021	0.066 082	Diethyl phthalate	0.2	28 154			N-Nitrosopyrrolidine	0.013	35
011	4-Aminobiphenyl	0.13	NA 083	p-Dimethylaminoazobenzene	0.13	NA 155			Parathion	0.014	4.6
012	Aniline	0.81	14 084	2,4-Dimethyl phenol	0.036	14 156			Total PCBs	0.1	10
013	Anthracene	0.059	3.4 085	Dimethyl phthalate	0.047	28 157			Pentachlorobenzene	0.055	10
014	Aramite	0.36	NA 086	Di-n-butyl phthalate	0.057	28 158			Pentachlorodibenzo-p-dioxins	0.00063	0.001
015	alpha-BHC	0.00014	0.066 087	1,4-Dinitrobenzene	0.32	2.3 159			Pentachlorodibenzo-furans	0.00035	0.001
016	beta-BHC	0.00014	0.066 088	4,6-Dinitro-o-cresol	0.28	160 160			Pentachloroethane	0.055	6
017	delta-BHC	0.023	0.066 089	2,4-Dinitrophenol	0.12	160 161			Pentachloronitrobenzene	0.055	4.8
018	gamma-BHC	0.0017	0.066 090	2,4-Dinitrotoluene	0.32	140 162			Pentachlorophenol	0.089	7.4
019	Benzene	0.14	10 091	2,6-Dinitrotoluene	0.55	28 163			Phenacetin	0.081	18
020	Benz(a)anthracene	0.059	3.4 092	Di-n-octyl phthalate	0.017	28 164			Phenanthrene	0.059	5.6
021	Benzal chloride	0.055	6 093	Di-n-propylnitrosamine	0.4	14 165			Phenol	0.039	6.2
022	Benzo(b) fluoranthene	0.11	6.8 094	1,4-Dioxane	12	170 166			Phorate	0.021	4.6
023	Benzo(k) fluoranthene	0.11	6.8 095	Diphenylamine	0.92	13 167			Phthalic acid	0.055	28
024	Benzo(g,h,i)perylene	0.0055	1.8 096	Diphenylnitrosamine	0.92	13 168			Phthalic anhydride	0.055	28
025	Benzo(a) pyrene	0.061	3.4 097	2,1-Diphenylhydrazine	0.087	NA 169			Pronamide	0.093	1.5
026	Bromodichloromethane	0.35	15 098	Disulfoton	0.017	6.2 170			Pyrene	0.067	8.2
027	Bromomethane/Methyl bromide	0.11	15 099	Endosulfan I	0.023	0.066 171			Pyridine	0.014	16
028	4-Bromophenyl phenyl ether	0.055	15 100	Endosulfan II	0.029	0.13 172			Safrole	0.081	22
029	n-Butyl alcohol	5.6	2.6 101	Endosulfan sulfate	0.029	0.13 173			Silvex/2,4,5-TP	0.72	7.9
030	Butyl benzyl phthalate	0.017	28 102	Endrin	0.0028	0.13 174			1,2,4,5-Tetrachlorobenzene	0.055	14
031	2-sec-Butyl-4,6-dinitrophenol/Dir	0.066	2.5 103	Endrin aldehyde	0.025	0.13 175			Tetrachloro-di-benzo-p-dioxins	0.00063	0.001
032	Carbon disulfide	3.8	4.8 mg/l TCLP 104	Ethyl Acetate	0.34	33 176			Tetrachloro-di-benzofurans	0.00063	0.001
033	Carbon tetrachloride	0.057	6 105	Ethyl benzene	0.057	10 177			1,1,1,2-Tetrachloroethane	0.057	6
034	Chlordane (alpha and gamma isomers)	0.0033	0.26 106	Ethyl cyanide/Propanenitrile	0.24	380 178			1,1,2,2-Tetrachloroethane	0.057	6
035	p-Chloroaniline	0.46	18 107	Ethyl ether	0.12	160 179			Tetrachloroethylene	0.056	8
036	Chlorobenzene	0.057	6 108	bis(2-Ethylhexyl) phthalate	0.28	28 180			2,3,4,6-Tetrachlorophenol	0.03	7.4
037	Chlorobenzilate	0.1	NA 109	Ethyl methacrylate	0.14	160 181			Toluene	0.08	10
038	2-Chloro-1,3-butadiene	0.057	0.28 110	Ethylene oxide	0.12	NA 182			Toxaphene	0.0095	2.6
039	Chlorodibromomethane	0.057	15 111	Famphur	0.017	15 183			Tribromomethane/Bromoform	0.63	15
040	Chloroethane	0.27	6 112	Flouranthene	0.068	3.4 184			1,2,4 Trichlorobenzene	0.055	19
041	bis(2-Chloroethoxy)methane	0.036	7.2 113	Fluorane	0.059	3.4 185			1,1,1-Trichloroethane	0.054	6
042	bis(2-Chloroethyl)ether	0.033	6 114	Heptachlor	0.0012	0.066 186			1,1,2-Trichloroethane	0.054	6
043	Chloroform	0.046	6 115	Heptachlor epoxide	0.016	0.066 187			Trichloroethylene	0.054	6
044	bis(2-Chloroisopropyl)ether	0.055	7.2 116	Hexachlorobenzene	0.055	10 188			Trichloromonofluoromethane	0.02	30
045	p-Chloro-m-cresol	0.018	14 117	Hexachlorobutadiene	0.055	5.6 189			2,4,5-Trichlorophenol	0.16	7.4
046	2-Chloroethyl vinyl ether	0.062	NA 118	Hexachlorocyclopentadiene	0.057	2.4 190			2,4,6-Trichlorophenol	0.035	7.4
047	Chloromethane/Methyl chloride	0.19	30 119	Hexachlorodibenzo-p-dioxins & furans	0.00063	0.001 191			2,4,5-Trichlorophenoxyacetic acid/2,4,5T	0.72	7.9
048	2-chloronaphthalene	0.055	5.6 120	Hexachloroethane	0.055	30 192			1,2,3-Trichloropropane	0.85	30
049	2-Chlorophenol	0.044	5.7 121	hexachloropropylene	0.035	30 193			1,1,2 Trichloro-1,2,2 trifluoroethane	0.057	30
050	3-Chloropropylene	0.036	30 122	Indeno (1,2,3-c,d) pyrene	0.0055	3.4 194			bis(2,3-Dibromopropyl) phosphate	0.11	0.1
051	Chrysene	0.059	3.4 123	Iodomethane	0.19	55 195			Vinyl chloride	0.27	6
052	o-Cresol	0.11	5.6 124	Isobutyl alcohol	5.6	170 196			Xylenes-Total	0.32	30
053	m-Cresol	0.77	5.6 125	Isodrin	0.021	0.066 197			Antimony	1.9	2.1mg/l TCLP
054	p-Cresol	0.77	5.6 126	Isosafrole	0.081	2.6 198			Arsenic	1.4	5.0mg/l TCLP
055	Cyclohexanone	0.36	0.75mg/l TCLP 127	Kepon	0.0011	0.13 199			Barium	1.2	7.5mg/l TCLP
056	o,p'-DDD	0.023	0.087 128	Methacrylonitrile	0.24	84 200			Beryllium	0.85	0.014mg/l TCLP
057	p,p'-DDD	0.023	0.087 129	Methanol	5.6	0.75mg/l TCLP 201			Cadmium	0.69	0.19mg/l TCLP
058	o,p'-DDE	0.031	0.087 130	Methacrylonitrile	0.081	1.5 202			Chromium (Total)	2.77	0.85mg/l TCLP
059	p,p'-DDE	0.031	0.087 131	Methacrylonitrile	0.25	0.18 203			Cyanide (Total)	1.2	590
060	o,p'-DDT	0.0039	0.087 132	3-Methylcholanthrene	0.0055	15 204			Cyanide (Amenable)	0.88	30
061	p,p'-DDT	0.0039	0.087 133	4,4-Methylene bis(2-chloroaniline)	0.5	30 205			Fluoride	35	NA
062	Dibenz(a,h)anthracene	0.055	8.2 134	Methylene chloride	0.089	30 206			Lead	0.69	0.37mg/l TCLP
063	Dibenz(a,g)pyrene	0.061	NA 135	Methyl ethyl ketone	0.28	36 207			Mercury-Nonwastewater from Refractor	NA	0.20mg/l TCLP
064	1,2-Dibromo-3-chloropropane	0.11	15 136	Methyl isobutyl ketone	0.14	33 208			Mercury-All Others	0.15	0.025mg/l TCLP
065	1,2-Dibromobenzene/ethylene dibromide	0.028	15 137	Methyl methacrylate	0.14	160 209			Nickel	3.98	5.0mg/l TCLP
066	Dibromomethane	0.11	15 138	Methyl methanesulfonate	0.018	NA 210			Selenium	0.82	0.16mg/l TCLP
067	m-Dichlorobenzene	0.036	6 139	Methyl parathion	0.014	4.6 211			Silver	0.43	0.30mg/l TCLP
068	o-Dichlorobenzene	0.088	6 140	Naphthalene	0.059	5.6 212			Sulfide	14	NA
069	p-Dichlorobenzene	0.09	6 141	2-Naphthylamine	0.52	NA 213			Thallium	1.4	0.078mg/l TCLP
070	Dichlorodifluoromethane	0.23	7.2 142	o-Nitroaniline	0.27	14 214			Vanadium	4.3	0.23mg/l TCLP
071	1,1-Dichloroethane	0.059	6 143	p-Nitroaniline	0.028	28 215			Zinc	2.61	5.3mg/l TCLP
072	1,2-Dichloroethane	0.21	6 144	Nitrobenzene	0.068	14					



Hawthorne, CA 90250

2000 North Alameda Street, Compton, California 90222-2799 (310) 537-7100 FAX (310) 639-2946

if WASTE WATER (WW) Check to left		CUSTOMER: <i>SPACE Exploration</i>				WASTE APPROVAL # <i>546510</i>					
if WASTE WATER (WW) Check to left		WASTE NAME: <i>Flammable Liquid</i>				EPA # <i>CA8000191536</i>					
Check >	Regulated Constituent Common Name	WW Standard mg/l	NWW Standard mg/kg unless TCLP	Check >	Regulated Constituent Common Name	WW Standard mg/l	NWW Standard mg/kg unless TCLP	Check >	Regulated Constituent Common Name	WW Standard mg/l	NWW Standard mg/kg unless TCLP
001	Acenaphthylene	0.059	3.4	073	1-1 Dichloroethylene	0.025	6	145	5-Nitro-o-toluidine	0.32	28
002	Acenaphthene	0.059	3.4	074	trans-1,2-Dichloroethylene	0.054	30	146	o-Nitrophenol	0.028	13
003	Acetone	0.28	160	075	2,4-Dichlorophenol	0.044	14	147	p-Nitrophenol	0.12	29
004	Acetonitrile	5.6	38	076	2,6-Dichlorophenol	0.044	14	148	N-Nitrosodiethylamine	0.4	28
005	Acetophenone	0.01	9.7	077	2,4-Dichlorophenoxyacetic acid/2,4-D	0.72	10	149	N-Nitrosodimethylamine	0.4	2.3
006	2-Acetylaminofluorene	0.059	140	078	1,2-Dichloropropane	0.85	18	150	N-Nitroso-di-n-butylamine	0.4	17
007	Acrolein	0.29	NA	079	cis-1,3-Dichloropropylene	0.036	18	151	N-Nitrosomethyl ethylamine	0.4	2.3
008	Acrylamide	19	23	080	trans-1,3-Dichloropropylene	0.036	18	152	N-Nitrosomorpholine	0.4	2.3
009	Acrylonitrile	0.24	84	081	Dieldrin	0.017	0.13	153	N-Nitrosopiperidine	0.013	35
010	Aldrin	0.021	0.068	082	Diethyl phthalate	0.2	28	154	N-Nitrosopyrrolidine	0.013	35
011	4-Aminobiphenyl	0.13	NA	083	p-Dimethylaminoazobenzene	0.13	NA	155	Parathion	0.014	4.6
012	Aniline	0.81	14	084	2,4-Dimethyl phenol	0.036	14	156	Total PCBs	0.1	10
013	Anthracene	0.059	3.4	085	Dimethyl phthalate	0.047	28	157	Pentachlorobenzene	0.055	10
014	Aramite	0.36	NA	086	Di-n-butyl phthalate	0.057	28	158	Pentachlorodibenzo-p-dioxins	0.00063	0.001
015	alpha-BHC	0.00014	0.066	087	1,4-Dinitrobenzene	0.32	2.3	159	Pentachlorodibenzo-furans	0.00063	0.001
016	beta-BHC	0.00014	0.066	088	4,6-Dinitro-o-cresol	0.28	160	160	Pentachloroethane	0.055	6
017	delta-BHC	0.023	0.066	089	2,4-Dinitrophenol	0.12	160	161	Pentachloronitrobenzene	0.055	4.8
018	gamma-BHC	0.0017	0.066	090	2,4-Dinitrotoluene	0.32	140	162	Pentachlorophenol	0.089	7.4
019	Benzene	0.14	10	091	2,6-Dinitrotoluene	0.55	28	163	Phenacetin	0.081	16
020	Benzo(a)anthracene	0.059	3.4	092	Di-n-octyl phthalate	0.017	28	164	Phenanthrene	0.059	5.6
021	Benzal chloride	0.055	6	093	Di-n-propylnitrosamine	0.4	14	165	Phenol	0.039	6.2
022	Benzo(b) fluoranthene	0.11	6.8	094	1,4-Dioxane	12	170	166	Phorate	0.021	4.6
023	Benzo(k) fluoranthene	0.11	6.8	095	Diphenylamine	0.92	13	167	Phthalic acid	0.055	28
024	Benzo(g,h,i)perylene	0.0055	1.8	096	Diphenylnitrosamine	0.92	13	168	Phthalic anhydride	0.055	28
025	Benzo(a) pyrene	0.061	3.4	097	2,1-Diphenylhydrazine	0.087	NA	169	Pronamide	0.093	1.5
026	Bromodichloromethane	0.35	15	098	Disulfurion	0.017	6.2	170	Pyrene	0.067	8.2
027	Bromomethane/Methyl bromide	0.11	15	099	Endosulfan I	0.023	0.066	171	Pyridine	0.014	16
028	4-Bromophenyl phenyl ether	0.055	15	100	Endosulfan II	0.029	0.13	172	Saflor	0.081	22
029	n-Butyl alcohol	5.6	2.6	101	Endosulfan sulfate	0.029	0.13	173	Silvex/2,4,5-TP	0.72	7.9
030	Butyl benzyl phthalate	0.017	28	102	Endrin	0.0028	0.13	174	1,2,4,50-Tetrachlorobenzene	0.055	14
031	2-sec-Butyl-4,6 dinitrophenol/Dir	0.066	2.5	103	Endrin aldehyde	0.025	0.13	175	Tetrachlorodi-benzo-p-dioxins	0.00063	0.001
032	Carbon disulfide	3.8	4.8 mg/l TCLP	104	Ethyl Acetate	0.34	33	176	Tetrachlorodibenzofurans	0.00063	0.001
033	Carbon tetrachloride	0.057	6	105	Ethyl benzene	0.057	10	177	1,1,1,2-Tetrachloroethane	0.057	6
034	Chlordane (alpha and gamma isomers)	0.0033	0.26	106	Ethyl cyanide/Propanenitrile	0.24	360	178	1,1,2,2-Tetrachloroethane	0.057	6
035	p-Chloroaniline	0.46	16	107	Ethyl ether	0.12	160	179	Tetrachloroethylene	0.056	6
036	Chlorobenzene	0.057	6	108	bis(2-Ethylhexyl) phthalate	0.28	28	180	2,3,4,6-Tetrachlorophenol	0.03	7.4
037	Chlorobenzilate	0.1	NA	109	Ethyl methacrylate	0.14	160	181	Toluene	0.08	10
038	2-Chloro-1,3-butadiene	0.057	0.28	110	Ethylene oxide	0.12	NA	182	Toxaphene	0.0095	2.6
039	Chlorodibromomethane	0.057	15	111	Famphur	0.017	15	183	Tribromomethane/Bromofom	0.63	15
040	Chloroethane	0.27	6	112	Flouranthene	0.068	3.4	184	1,2,4 Trichlorobenzene	0.055	19
041	bis(2-Chloroethoxy)methane	0.036	7.2	113	Fluorene	0.059	3.4	185	1,1,1-Trichloroethane	0.054	6
042	bis(2-Chloroethyl)ether	0.033	6	114	Heptachlor	0.0012	0.066	186	1,1,2-Trichloroethane	0.054	6
043	Chloroform	0.046	6	115	Heptachlor epoxide	0.016	0.066	187	Trichloroethylene	0.054	6
044	bis(2-Chloroisopropyl)ether	0.055	7.2	116	Hexachlorobenzene	0.055	10	188	Trichloromono fluoromethane	0.02	30
045	p-Chloro-m-cresol	0.018	14	117	Hexachlorobutadiene	0.055	5.6	189	2,4,5-Trichlorophenol	0.18	7.4
046	2-Chloroethyl vinyl ether	0.062	NA	118	Hexachlorocyclopentadiene	0.057	2.4	190	2,4,6-Trichlorophenol	0.035	7.4
047	Chloromethane/Methyl chloride	0.19	30	119	Hexachlorodibenzo-p-dioxins & furans	0.00063	0.001	191	2,4,5-Trichlorophenoxyacetic acid/2,4,5T	0.72	7.9
048	2-Chloronaphthalene	0.055	5.6	120	Hexachloroethane	0.055	30	192	1,2,3-Trichloropropane	0.85	30
049	2-Chlorophenol	0.044	5.7	121	hexachloropropylene	0.035	30	193	1,1,2 Trichloro-1,2,2,2-trifluoroethane	0.057	30
050	3-Chloropropylene	0.036	30	122	Indeno (1,2,3-c,d) pyrene	0.0055	3.4	194	tris(2,3-Dibromopropyl) phosphate	0.11	0.1
051	Chrysene	0.059	3.4	123	Iodomethane	0.19	65	195	Vinyl chloride	0.27	6
052	o-Cresol	0.11	5.6	124	Isobutyl alcohol	5.6	170	196	Xylenes-Total	0.32	30
053	m-Cresol	0.77	5.6	125	Isodrin	0.021	0.066	197	Antimony	1.9	2.1mg/l TCLP
054	p-Cresol	0.77	5.6	126	Isosaltrole	0.081	2.5	198	Arsenic	1.4	5.0mg/l TCLP
055	Cyclohexanone	0.36	0.75mg/l TCLP	127	Kepon	0.0011	0.13	199	Barium	1.2	7.6mg/l TCLP
056	o,p-DDD	0.023	0.087	128	Methacrylonitrile	0.24	84	200	Beryllium	0.85	0.014mg/l TCLP
057	p,p'-DDD	0.023	0.087	129	Methanol	5.6	0.75mg/l TCLP	201	Cadmium	0.69	0.19mg/l TCLP
058	o,p'-DDE	0.031	0.087	130	Methapyrene	0.081	1.5	202	Chromium (Total)	2.77	0.86mg/l TCLP
059	p,p'-DDE	0.031	0.087	131	Methoxychlor	0.25	0.18	203	Cyanide (Total)	1.2	590
060	o,p'-DDT	0.0039	0.087	132	3-Methylcholanthrene	0.0055	15	204	Cyanide (Amenable)	0.85	30
061	p,p'-DDT	0.0039	0.087	133	4,4-Methylene bis(2-chloroaniline)	0.5	30	205	Fluoride	35	NA
062	Dibenz(a,h)anthracene	0.055	8.2	134	Methylene chloride	0.089	30	206	Lead	0.69	0.37mg/l TCLP
063	Debenz(a,e)pyrene	0.061	NA	135	Methyl ethyl ketone	0.28	36	207	Mercury-Nonwastewater from Retort	NA	0.20mg/l TCLP
064	1,2-Dibromo-3-chloropropane	0.11	15	136	Methyl isobutyl ketone	0.14	33	208	Mercury-All Others	0.15	0.025mg/l TCLP
065	1,2-Dibromothane/ethylene dibromide	0.028	15	137	Methyl methacrylate	0.14	160	209	Nickel	3.98	5.0mg/l TCLP
066	Dibromomethane	0.11	15	138	Methyl methansulfonate	0.018	NA	210	Selenium	0.82	0.16mg/l TCLP
067	m-Dichlorobenzene	0.036	6	139	Methyl parathion	0.014	4.5	211	Silver	0.43	0.30mg/l TCLP
068	o-Dichlorobenzene	0.088	6	140	Naphthalene	0.059	5.6	212	Sulfide	14	NA
069	p-Dichlorobenzene	0.09	6	141	2-Naphthylamine	0.52	NA	213	Thallium	1.4	0.078mg/l TCLP
070	Dichlorodifluoromethane	0.23	7.2	142	o-Nitroaniline	0.27	14	214	Vanadium	4.3	0.23mg/l TCLP
071	1,1-Dichloroethane	0.059	6	143	p-Nitroaniline	0.028	28	215	Zinc	2.51	5.3mg/l TCLP
072	1,2-Dichloroethane	0.21	6	144	Nitrobenzene	0.068	14				



EPA I.D. # CAB(7)(c)191536

MANIFEST # 006178582 JJK

~~SEE INSTRUCTIONS (1,2,3 and 4)~~

Pursuant to CCR Title 22, Section 66268.7 (40 CFR 268.7), I hereby notify that this waste shipment contains one or more of the following wastes restricted under the land disposal restriction for which applicable treatment standards are set forth in CCR Title 22, Chapter 18, Land Disposal Restrictions:

[illegible]

IF NECESSARY USE A CONTINUATION PAGE.

Page 1 of .

CERTIFICATION

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing, or through knowledge of the process generating the waste, to support this certification. I believe that the information that I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

Space Exploration

DATE 11/6/09

Authorized Signature on Behalf of SPACE

Araceli Rodriguez CSR
PRINTED NAME/TITLE

if WASTE WATER (WW) Check to left		CUSTOMER: <u>Space Exploration</u>						WASTE APPROVAL # <u>304635</u>			
if WASTE WATER (WW) Check to left		WASTE NAME: <u>Flammable Liquid</u>						EPA # <u>CAB000191536</u>			
Check >	Regulated Constituent Common Name	WW Standard mg/l	WW Standard mg/kg unless TCLP	Check >	Regulated Constituent Common Name	WW Standard mg/l	WW Standard mg/kg unless TCLP	Check >	Regulated Constituent Common Name	WW Standard mg/l	WW Standard mg/kg unless TCLP
001	Acenaphthylene	0.059	3.4	073	1,1-Dichloroethylene	0.025	6	145	5-Nitro-o-toluidine	0.32	28
002	Acenaphthene	0.059	3.4	074	trans-1,2-Dichloroethylene	0.054	30	146	o-Nitrophenol	0.028	13
003	Acetone	0.28	160	075	2,4-Dichlorophenol	0.044	14	147	p-Nitrophenol	0.12	29
004	Acetonitrile	5.6	38	076	2,6-Dichlorophenol	0.044	14	148	N-Nitrosodiethylamine	0.4	28
005	Acetophenone	0.01	9.7	077	2,4-Dichlorophenoxyacetic acid/2,4-D	0.72	10	149	N-Nitrosodimethylamine	0.4	2.3
006	2-Acetylaminofluorene	0.059	140	078	1,2-Dichloropropane	0.85	18	150	N-Nitroso-di-n-butylamine	0.4	17
007	Acrolein	0.29	NA	079	cis-1,3-Dichloropropylene	0.036	18	151	N-Nitrosomethylamine	0.4	2.3
008	Acrylamide	19	23	080	trans-1,3-Dichloropropylene	0.036	18	152	N-Nitrosomorpholine	0.4	2.3
009	Acrylonitrile	0.24	84	081	Dieldrin	0.017	0.13	153	N-Nitrosopiperidine	0.013	35
010	Aldrin	0.021	0.066	082	Diethyl phthalate	0.2	28	154	N-Nitrosopyrrolidine	0.013	35
011	4-Aminobiphenyl	0.13	NA	083	p-Dimethylaminoazobenzene	0.13	NA	155	Parathion	0.014	4.6
012	Aniline	0.81	14	084	2,4-Dimethyl phenol	0.036	14	156	Total PCBs	0.1	10
013	Anthracene	0.059	3.4	085	Dimethyl phthalate	0.047	28	157	Pentachlorobenzene	0.055	10
014	Aramite	0.36	NA	086	Di-n-butyl phthalate	0.057	28	158	Pentachlorodibenzo-p-dioxins	0.00063	0.001
015	alpha-BHC	0.00014	0.066	087	1,4-Dinitrobenzene	0.32	2.3	159	Pentachlorodibenzo-furans	0.00063	0.001
016	beta-BHC	0.00014	0.066	088	4,6-Dinitro-o-cresol	0.28	160	160	Pentachloroethane	0.055	6
017	delta-BHC	0.023	0.066	089	2,4-Dinitrophenol	0.12	160	161	Pentachloronitrobenzene	0.055	4.8
018	gamma-BHC	0.0017	0.066	090	2,4-Dinitrotoluene	0.32	140	162	Pentachlorophenol	0.089	7.4
019	Benzene	0.14	10	091	2,6-Dinitrotoluene	0.55	28	163	Phenacetin	0.081	18
020	Benz(a)anthracene	0.059	3.4	092	Di-n-octyl phthalate	0.017	28	164	Phenanthrene	0.059	5.6
021	Benzal chloride	0.055	6	093	Di-n-propyltin diamine	0.4	14	165	Phenol	0.039	6.2
022	Benz(b)fluoranthene	0.11	6.8	094	1,4-Dioxane	12	170	166	Phorate	0.021	4.8
023	Benz(k)fluoranthene	0.11	6.8	095	Diphenylamine	0.92	13	167	Phthalic acid	0.055	28
024	Benz(g,h,i)perylene	0.0055	1.8	096	Diphenylnitrosamine	0.92	13	168	Phthalic anhydride	0.055	28
025	Benz(a)pyrene	0.061	3.4	097	2,1-Diphenylhydrazine	0.087	NA	169	Promide	0.093	1.5
026	Bromodichloromethane	0.35	15	098	Disulfoton	0.017	6.2	170	Pyrene	0.067	8.2
027	Bromomethane/Methyl bromide	0.11	15	099	Endosulfan I	0.023	0.066	171	Pyridine	0.014	16
028	4-Bromophenyl phenyl ether	0.055	15	100	Endosulfan II	0.029	0.13	172	Safrole	0.081	22
029	n-Butyl alcohol	5.6	2.6	101	Endosulfan sulfate	0.029	0.13	173	Savex/2,4,5-TP	0.72	7.9
030	Butyl benzyl phthalate	0.017	28	102	Endrin	0.0028	0.13	174	1,2,4,5-Tetrachlorobenzene	0.055	14
031	2-sec-Butyl-4,5-dinitrophenol/Dir	0.066	2.6	103	Endrin aldehyde	0.025	0.13	175	Tetrachloro-benzo-p-dioxins	0.00063	0.001
032	Carbon disulfide	3.8	4.8 mg/l TCLP	104	Ethyl Acetate	0.34	33	176	Tetrachlorodibenzo-furans	0.00063	0.001
033	Carbon tetrachloride	0.057	6	105	Ethyl benzene	0.057	10	177	1,1,1,2-Tetrachloroethane	0.057	6
034	Chlordane (alpha and gamma isomers)	0.0033	0.26	106	Ethyl cyanide/Propanenitrile	0.24	360	178	1,1,2,2-Tetrachloroethane	0.057	6
035	p-Chloroaniline	0.46	16	107	Ethyl ether	0.12	160	179	Tetrachloroethylene	0.056	6
036	Chlorobenzene	0.057	6	108	bis(2-Ethylhexyl) phthalate	0.28	28	180	2,3,4,6-Tetrachlorophenol	0.03	7.4
037	Chlorobenzilate	0.1	NA	109	Ethyl methacrylate	0.14	160	181	Toluene	0.08	10
038	2-Chloro-1,3-butadiene	0.057	0.28	110	Ethylene oxide	0.12	NA	182	Toxaphene	0.0095	2.6
039	Chlorodibromomethane	0.057	15	111	Famphur	0.017	15	183	Tribromomethane/Bromoform	0.63	15
040	Chloroethane	0.27	6	112	Flouranthene	0.068	3.4	184	1,2,4-Trichlorobenzene	0.056	19
041	bis(2-Chloroethoxy)methane	0.036	7.2	113	Fluorene	0.059	3.4	185	1,1,1-Trichloroethane	0.054	6
042	bis(2-Chloroethyl)ether	0.033	6	114	Heptachlor	0.0012	0.066	186	1,1,2-Trichloroethane	0.054	6
043	Chloroform	0.046	6	115	Heptachlor epoxide	0.016	0.066	187	Trichloroethylene	0.054	6
044	bis(2-Chloroisopropyl)ether	0.055	7.2	116	Hexachlorobenzene	0.055	10	188	Trichloromono-fluoromethane	0.02	30
045	p-Chloro-m-cresol	0.018	14	117	Hexachlorobutadiene	0.055	5.6	189	2,4,5-Trichlorophenol	0.18	7.4
046	2-Chloroethyl vinyl ether	0.082	NA	118	Hexachlorocyclopentadiene	0.057	2.4	190	2,4,6-Trichlorophenol	0.035	7.4
047	Chloromethane/Methyl chloride	0.19	30	119	Hexachlorodibenzo-p-dioxins & furans	0.00063	0.001	191	2,4,5-Trichlorophenoxyacetic acid/2,4,5T	0.72	7.9
048	2-chloronaphthalene	0.055	5.6	120	Hexachloroethane	0.055	30	192	1,2,3-Trichloropropane	0.85	30
049	2-Chlorophenol	0.044	5.7	121	hexachloropropylene	0.035	30	193	1,1,2-Trichloro-1,2,2-trifluoroethane	0.057	30
050	3-Chloropropylene	0.036	30	122	Indeno (1,2,3-c,d) pyrene	0.0055	3.4	194	tris(2,3-Dibromopropyl) phosphate	0.11	0.1
051	Chrysene	0.059	3.4	123	Iodomethane	0.19	65	195	Vinyl chloride	0.27	6
052	o-Cresol	0.11	5.6	124	Isobutyl alcohol	5.6	170	196	Xylenes-Total	0.32	30
053	m-Cresol	0.77	5.6	125	Isodrin	0.021	0.066	197	Antimony	1.9	2.1mg/l TCLP
054	p-Cresol	0.77	5.6	126	Isosafrole	0.081	2.6	198	Arsenic	1.4	5.0mg/l TCLP
055	Cyclohexanone	0.36	0.75mg/l TCLP	127	Kepon	0.0011	0.13	199	Barium	1.2	7.6mg/l TCLP
056	o,p'-DDD	0.023	0.087	128	Methacrylonitrile	0.24	84	200	Beryllium	0.85	0.014mg/l TCLP
057	p,p'-DDD	0.023	0.087	129	Methanol	5.6	0.75mg/l TCLP	201	Cadmium	0.69	0.19mg/l TCLP
058	o,p'-DDE	0.031	0.087	130	Methapyrene	0.081	1.5	202	Chromium (Total)	2.77	0.86mg/l TCLP
059	p,p'-DDE	0.031	0.087	131	Methoxychlor	0.25	0.18	203	Cyanide (Total)	1.2	590
060	o,p'-DDT	0.0039	0.087	132	3-Methylcholanthrene	0.0055	15	204	Cyanide (Amenable)	0.86	30
061	p,p'-DDT	0.0039	0.087	133	4,4'-Methylene bis(2-chloroaniline)	0.5	30	205	Fluoride	35	NA
062	Dibenz(a,h)anthracene	0.055	8.2	134	Methylene chloride	0.089	30	206	Lead	0.69	0.37mg/l TCLP
063	Dibenz(a,j)pyrene	0.061	NA	135	Methyl ethyl ketone	0.28	36	207	Mercury-Nonwastewater from Refractor	NA	0.20mg/l TCLP
064	1,2-Dibromo-3-chloropropane	0.11	15	136	Methyl isobutyl ketone	0.14	33	208	Mercury-All Others	0.15	0.025mg/l TCLP
065	1,2-Dibromoethane/ethylene dibromide	0.028	15	137	Methyl methacrylate	0.14	160	209	Nickel	3.98	5.0mg/l TCLP
066	Dibromomethane	0.11	15	138	Methyl methanesulfonate	0.018	NA	210	Selenium	0.82	0.16mg/l TCLP
067	m-Dichlorobenzene	0.036	6	139	Methyl parathion	0.014	4.6	211	Silver	0.43	0.30mg/l TCLP
068	o-Dichlorobenzene	0.088	6	140	Naphthalene	0.059	5.6	212	Sulfide	14	NA
069	p-Dichlorobenzene	0.09	6	141	2-Naphthylamine	0.52	NA	213	Thallium	1.4	0.078mg/l TCLP
070	Dichlorodifluoromethane	0.23	7.2	142	o-Nitroaniline	0.27	14	214	Vanadium	4.3	0.23mg/l TCLP
071	1,1-Dichloroethane	0.059	6	143	p-Nitroaniline	0.028	28	215	Zinc	2.51	5.3mg/l TCLP
072	1,2-Dichloroethane	0.21	6	144	Nitrobenzene	0.068	14				

Siemens Water Technologies Corp.

LAND DISPOSAL RESTRICTION NOTIFICATION FORM

Pursuant to CCR Title 22, Section 66268.7(40 CFR 268.7(a), I hereby notify that this waste shipment contains one or more of the following wastes restricted under the land disposal restrictions for which applicable treatment standards are set forth in CCR Title 22, Section 66268.40 (40 CFR 268.40)

Manifest Num# 000765326JJK Generator Name : SPACE EX EPA#CAR000191536

RCRA HAZARDOUS WASTE INFORMATION

U.S.F. PROFILE NUMBER/ MANIFEST LINE ITEM NUMBER	List all D, F, K, U & P Codes	Subcategory (IF ANY)	WASTEWATER/ NONWASTEWATER WW NWW	California List ** Per CCR Title 22, Section 66268.32	Hazardous Debris Subject To CCR Title 22, Sec 66268.45
1)AP169389	D007		<input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>
			<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>
			<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>
			<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>

ADDITIONAL INFORMATION FOR D001, D002, D012-43, F001-5 & F039 WASTE STREAMS: (check one)

- ☒ There are no underlying hazardous constituents (UHCs) present
- ☐ There are underlying hazardous constituents (UHCs) present which do not meet treatment standards per CCR Title 22, Section 66268.48
(Use the attached UTS Table and check the appropriate constituent(s) present in the waste stream)

DETERMINATION BASED UPON : (check one)

- ☒ Knowledge of the process generating the waste and the raw materials used and the reaction products.
- ☐ Results from analytical testing Analytical results attached ☐ YES ☐ NO

TERM DEFINITIONS:

* **WASTEWATER** = per CCR Title 22, Section 66260.10, WASTE THAT CONTAINS LESS THAN 1% BY WEIGHT TOTAL TOXIC ORGANICS (TOCs) AND 1% BY WEIGHT TOTAL SUSPENDED SOLIDS (TSS).

* **CALIFORNIA LIST** = THE FOLLOWING HAZARDOUS WASTES ARE PROHIBITED FROM LAND DISPOSAL: per CCR Title 22, Section 66268.32

- Liquid hazardous waste with a pH less than or equal to 2.0
- Liquid hazardous waste containing PCB's at concentration of greater than or equal to 50 ppm
- Liquid hazardous waste, including free liquids associated with any solids/sludge, containing free cyanide at concentrations greater than or equal to 1,000 mg/L
- Liquid hazardous waste, including free liquids associated with any solids/sludge, containing metals at concentrations greater than or equal to the following:

ARSENIC	500 mg/L	MERCURY	20 mg/L
CADMIUM	100 mg/L	NICKEL	134 mg/L
CHROMIUM	500 mg/L	SELENIUM	100 mg/L
LEAD	500 mg/L	THALLIUM	130 mg/L

- Liquid hazardous waste, that contains HOC's in total concentration greater than or equal to 1,000 mg/L
- Non-liquid RCRA hazardous waste containing HOC's in total concentration greater than or equal to 1,000 mg/L

CERTIFICATION

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification. I believe that the information I have submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment

SOS for SPACE EX

COMPANY NAME

AUTHORIZED SIGNATURE

DATE

6/25/09



Rho Chem Corporation,
a wholly owned subsidiary of PHILIP SERVICES CORP.,
RCRA Land Disposal Restriction Notification Form EZ

Generator: SPACE EXPLORATION TECH. U.S. EPA I.D. #: CAR000191536

Profile #407397-00, 390575-00, 408763-00, 408764-00, 408760-00 Manifest #: 000765325JJK

The wastes identified on this form are subject to the land disposal restrictions of 40 CFR Part 268. The wastes do not meet the treatment standards specified in 268.32, Subpart D or do not meet the applicable prohibition levels specified in 268.32. Pursuant to 40 CFR 268.7(a), the required information applicable to each waste is identified below (check all boxes that apply):

Treatability Group: ☐ Wastewater ☐ Nonwastewater
(Wastewaters contain less than 1% filterable solids and less than 1% Total Organic Carbon)

D001 Ignitable (except for High TOC) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems
(Complete form UC, unless D001 is the only "D" code and the waste is to be combusted or recovered.)

☒ D001 Ignitable (except for High TOC) managed in CWA/ CWA-equivalent/Class I SDWA systems

☐ D001 High TOC Ignitable (greater than 10% total organic carbon)

D002 Corrosive managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems (Complete form UC)

☐ D002 Corrosive managed in CWA/ CWA-equivalent/Class I SDWA systems

☐ D003 Reactive Sulfides based on 261.23(a)(5)

☐ D003 Reactive Cyanides based on 261.23(a)(5)

D003 Water Reactives based on 261.23(a)(2),(3) and (4) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems (Complete form UC)

☐ D003 Water Reactives based on 261.23(a)(2),(3) and (4) managed in CWA/ CWA-equivalent/Class I SDWA systems

☐ D003 Other Reactives based on 261.23(a)(1) (Complete form UC)

If D004-43 boxes are checked, complete and attach Form UC to address underlying hazardous constituents (unless these wastes are to be managed in CWA/CWA-equivalent/Class I SDWA systems):

☐ D004 Arsenic ☐ D005 Barium ☐ D006 Cadmium ☐ D006 Cadmium-containing batteries

☐ D007 Chromium ☐ D008 Lead ☐ D008 Lead acid batteries

☐ D009 High mercury inorganic (>260 mg/kg total), including incinerator residue and residues from RMERC

☐ D009 High-mercury organic (>260 mg/kg total), not including incinerator residue

☐ D009 Low-mercury (<260 mg/kg total) ☐ D009 All D009 wastewaters

☐ D010 Selenium ☐ D011 Silver

☐ D012 Endrin ☐ D023 *o*-Cresol ☐ D033 Hexachlorobutadiene

☐ D013 Lindane ☐ D024 *m*-Cresol ☐ D034 Hexachloroethane

☐ D014 Methoxychlor ☐ D025 *p*-Cresol ☐ D035 Methyl ethyl ketone

☐ D015 Toxaphene ☐ D026 Cresols (Total) ☐ D036 Nitrobenzene

☐ D016 2,4-D ☐ D027 *p*-Dichlorobenzene ☐ D037 Pentachlorophenol

☐ D017 2,4,5-TP (Silvex) ☐ D028 1,2-Dichloroethane ☐ D038 Pyridine

☐ D018 Benzene ☐ D029 1,1-Dichloroethylene ☐ D039 Tetrachloroethylene

☐ D019 Carbon tetrachloride ☐ D030 2,4-Dinitrotoluene ☐ D040 Trichloroethylene

☐ D020 Chlordane ☐ D031 Heptachlor ☐ D041 2,4,5-Trichlorophenol

☐ D021 Chlorobenzene ☐ D032 Hexachlorobenzene ☐ D042 2,4,6-Trichlorophenol

☐ D022 Chloroform ☐ D043 Vinyl chloride

Note: If any bolded entries are checked, form UC must be completed to address underlying hazardous constituents, unless the material is treated in a Clean Water Act (CWA) treatment process or unless otherwise noted above.

In addition, the following wastes are included in this shipment:

xx F001-F005 spent solvents. (If this box is checked, complete the F001-F005 section on the back of this form. Check the hazardous waste number(s) that applies, and identify the constituents likely to be present in the waste.)

If this shipment carries additional waste codes that are not addressed above, identify them here:

<u>EPA Waste Code</u>	<u>Subcategory (if applicable)</u>	<u>EPA Waste Code</u>	<u>Subcategory (if applicable)</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

F001-F005 Spent Solvents

Check the box(es) that applies; identify the individual constituents likely to be present.

Hazardous waste description	Regulated hazardous constituents	
<input type="checkbox"/> F001 Spent halogenated solvents used in degreasing	Carbon tetrachloride Tetrachloroethylene Trichloroethylene Trichloromonofluoromethane	Methylene chloride 1,1,1-Trichloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane
<input type="checkbox"/> F002 Spent halogenated solvents	Chlorobenzene Methylene chloride 1,1,1-Trichloroethane Trichloroethylene Trichloromonofluoromethane	<i>o</i> -Dichlorobenzene Tetrachloroethylene 1,1,2-Trichloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane
F003 Spent non-halogenated solvents	Acetone Cyclohexanone* Ethyl benzene Methanol* Xylenes (total)	<i>n</i> -Butyl alcohol Ethyl acetate Ethyl ether Methyl isobutyl ketone
<input type="checkbox"/> F004 Spent non-halogenated solvents	<i>m</i> -Cresol <i>p</i> -Cresol Nitrobenzene	<i>o</i> -Cresol Cresol-mixed isomers (cresylic acid)
X F005 Spent non-halogenated solvents	Benzene 2-Ethoxyethanol Methyl ethyl ketone Pyridine	Carbon disulfide* Isobutyl alcohol 2-Nitropropane Toluene

*The treatment standards for carbon disulfide, cyclohexanone, and methanol nonwastewaters are based on the TCLP and apply to spent solvent nonwastewaters containing only one, two, or all three of these constituents. The treatment standards for these three constituents do not apply when any of the other F001-F005 constituents are present in the waste.

Hazardous Debris

☐ This shipment contains hazardous debris that will be treated to comply with the alternative treatment standards of 268.45 (e.g., macroencapsulation or at blasting).

(The definitions of "debris" and "hazardous debris" are in 40 CFR 268.2. Per 268.45, hazardous debris must be treated for each "contaminant subject to treatment." To determine these, look up the waste code in 268.40 and list the regulated hazardous constituents for each code.)

The contaminants subject to treatment for this debris are identified below:

EPA Waste Code	Subcategory	Contaminants subject to treatment	

***Rho Chem Corporation,
a wholly owned subsidiary of PHILIP SERVICES CORP.,
RCRA Land Disposal Restriction Notification Form UC***

Generator: SPACE EXPLORATION TECH. U.S. EPA I.D. #: CAR000191536

Profile #: 416510-00

Manifest #: 000765325JJK

In accordance with 40 CFR 268.7(a), the underlying hazardous constituents must be addressed in this waste. Per 268.2(i), "underlying hazardous constituent" means any constituent listed in 268.48, Table UTS—Universal Treatment Standard which can reasonably be expected to be present at the point of generation of the hazardous waste, at a concentration above the constituent-specific UTS treatment standard. Refer to Form-EZ (attached) for the waste code(s), treatability group, and subcategory applicable to this waste.

In order to address underlying hazardous constituents in characteristic wastes, please check the appropriate box:

- ☐ I have reviewed the UTS list of 268.48, and per 268.7(a), I have determined that there are no underlying hazardous constituents reasonably expected to be present in this waste.
- ☐ I have reviewed the UTS list of 268.48, and per 268.7(a), I have determined that underlying hazardous constituents are present in this waste. The underlying hazardous constituents are identified as follows:

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

The determination of underlying hazardous constituents was based on:

- ☐ Generator's knowledge of the waste
- ☐ Analysis

I certify that I personally have examined and am familiar with the waste through analysis and testing, or through knowledge of the waste to support this certification. I certify that as an authorized representative of the generator named above, all the information submitted in this notification is true and correct to the best of my knowledge.

Araceli Rodriguez
Printed Name

Re B.
Signature

6/25/09
Date

List of Underlying Hazardous Constituents 40 CFR 268.48

Circle or otherwise identify the underlying hazardous constituents present in the waste:

Organic Constituent	Organic Constituent	Organic Constituent	Organic Constituent
A2213	2-Chlorophenol	Ethyl acetate	Oxamyl
Acenaphthylene	3-Chloropropylene	Ethyl benzene	Parathion
Acenaphthene	Chrysene	Ethyl cyanide/Propanenitrile	Total PCBs(sum of all isomers, or all
Aroclors)			
Acetone	<i>o</i> -Cresol	Ethyl ether	Pebulate
Acetonitrile	<i>m</i> -Cresol	bis(2-Ethylhexyl)phthalate	Pentachlorobenzene
Acetophenone	<i>p</i> -Cresol	Ethyl methacrylate	PeCDDs(All Pentachlorodibenzo- <i>p</i> -dioxin
2-Acetylaminofluorene	<i>m</i> -Cumenyl methylcarbamate	Ethylene oxide	PeCDFs(All Pentachlorodibenzofurans)
Acrolein	Cyclohexanone	Famphur	Pentachloroethane
Acrylamide	<i>o,p'</i> -DDD	Fluoranthene	Pentachloronitrobenzene
Acrylonitrile	<i>p,p'</i> -DDD	Fluorene	Pentachlorophenol
Aldicarb sulfone	<i>o,p'</i> -DDE	Formetanate hydrochloride	Phenacetin
Aldrin	<i>p,p'</i> -DDE	Formparanate	Phenanthrene
4-Aminobiphenyl	<i>o,p'</i> -DDT	Heptachlor	Phenol
Aniline	<i>p,p'</i> -DDT	Heptachlor epoxide	<i>o</i> -Phenylenediamine
Anthracene	Dibenz(a,h)anthracene	Hexachlorobenzene	Phorate
Aramite	Dibenz(a,e)pyrene	Hexachlorobutadiene	Phthalic acid
alpha-BHC	1,2-Dibromo-3-chloropropane	Hexachlorocyclopentadiene	Phthalic anhydride
beta-BHC	1,2-Dibromoethane/Ethylene dibromide	HxCDDs(All Hexachlorodibenzo- <i>p</i> -dioxins)	Physostigmine
delta-BHC	Dibromomethane	HxCDFs(All Hexachlorodibenzofurans)	Physostigmine salicylate
gamma-BHC	<i>m</i> -Dichlorobenzene	Hexachloroethane	Promecarb
Barban	<i>o</i> -Dichlorobenzene	Hexachloropropylene	Pronamide
Bendiocarb	<i>p</i> -Dichlorobenzene	Indeno(1,2,3- <i>c,d</i>)pyrene	Propham
Bendiocarb phenol	Dichlorodifluoromethane	Iodomethane	Propoxur
Benomyl	1,1-Dichloroethane	Isobutyl alcohol	Prosulfocarb
Benzene	1,2-Dichloroethane	Isodrin	Pyrene
Benz(a)anthracene	1,1-Dichloroethylene	Isolan	Pyridine
Benzal chloride	<i>trans</i> -1,2-Dichloroethylene	Isosafrole	Safrole
Benzo(b)fluoranthene	2,4-Dichlorophenol	Kepone	Silvex/2,4,5-TP
Benzo(k)fluoranthene	2,6-Dichlorophenol	Methacrylonitrile	1,2,4,5-Tetrachlorobenzene
Benzo(g,h,i)perylene	2,4-Dichlorophenoxyacetic acid/2,4-D	Methanol	TCDDs(All Tetrachlorodibenzo- <i>p</i> -dioxins)
Benzo(a)pyrene	1,2-Dichloropropane	Methapyrilene	TCDFs(All Tetrachlorodibenzofurans)
Bromodichloromethane	<i>cis</i> -1,3-Dichloropropylene	Methiocarb	1,1,1,2-Tetrachloroethane
Bromomethane/Methyl bromide	<i>trans</i> -1,3-Dichloropropylene	Methomyl	1,1,2,2-Tetrachloroethane
4-Bromophenyl phenyl ether	Dieldrin	Methoxychlor	Tetrachloroethylene
<i>n</i> -Butyl alcohol	Diethylene glycol, dicarbamate	3-Methylcholanthrene	2,3,4,6-Tetrachlorophenol
Butylate	Diethyl phthalate	4,4-Methylene-bis(2-chloroaniline)	Thiodicarb
Butyl benzyl phthalate	<i>p</i> -Dimethylaminoazobenzene	Methylene chloride	Thiophanate-methyl
2-sec-Butyl-4,6-dinitrophenol/Dinoseb	2,4-Dimethyl phenol	Methyl ethyl ketone	Tirpate
Carbaryl	Dimethyl phthalate	Methyl isobutyl ketone	Toluene
Carbenzadim	Dimetilan	Methyl methacrylate	Toxaphene
Carbofuran	Di- <i>n</i> -butyl phthalate	Methyl methansulfonate	Triallate
Carbofuran phenol	1,4-Dinitrobenzene	Methyl parathion	Tribromomethane/Bromofom
Carbon disulfide	4,6-Dinitro- <i>o</i> -cresol	Metolcarb	2,4,6-Tribromophenol
Carbon tetrachloride	2,4-Dinitrophenol	Mexacarbate	1,2,4-Trichlorobenzene
Carbosulfan	2,4-Dinitrotoluene	Molinate	1,1,1-Trichloroethane
Chlordane (alpha and gamma isomers)	2,6-Dinitrotoluene	Naphthalene	1,1,2-Trichloroethane
<i>p</i> -Chloroaniline	Di- <i>n</i> -octyl phthalate	2-Naphthylamine	Trichloroethylene
Chlorobenzene	Di- <i>n</i> -propylnitrosamine	<i>o</i> -Nitroaniline	Trichloromonofluoromethane
Chlorobenzilate	1,4-Dioxane	<i>p</i> -Nitroaniline	2,4,5-Trichlorophenol
2-Chloro-1,3-butadiene	Diphenylamine	Nitrobenzene	2,4,6-Trichlorophenol
Chlorodibromomethane	Diphenylnitrosamine	5-Nitro- <i>o</i> -toluidine	2,4,5-Trichlorophenoxyacetic acid/2,4,5-T
Chloroethane	1,2-Diphenylhydrazine	<i>o</i> -Nitrophenol	1,2,3-Trichloropropane
bis(2-Chloroethoxy)methane	Disulfoton	<i>p</i> -Nitrophenol	1,1,2-Trichloro-1,1,2,2-trifluoroethane
bis(2-Chloroethyl)ether	Dithiocarbamates (total)	N-Nitrosodiethylamine	Triethylamine
Chloroform	Endosulfan I	N-Nitrosodimethylamine	tris-(2,3-Dibromopropyl)phosphate
bis(2-Chloroisopropyl)ether	Endosulfan II	N-Nitroso-di- <i>n</i> -butylamine	Vernolate
<i>p</i> -Chloro- <i>m</i> -cresol	Endosulfan sulfate	N-Nitrosomethylethylamine	Vinyl chloride
2-Chloroethyl vinyl ether	Endrin	N-Nitrosomorpholine	Xylenes-mixed isomers
Chloromethane/Methyl chloride concentrations)	Endrin aldehyde	N-Nitrosopiperidine	(sum of <i>o</i> -, <i>m</i> -, and <i>p</i> -xylene
2-Chloronaphthalene	EPTC	N-Nitrosopyrrolidine	
Inorganic Constituent	Inorganic Constituent	Inorganic Constituent	Inorganic Constituent
Antimony	Cadmium	Lead	Silver
Arsenic	Chromium (Total)	Mercury-Nonwastewater from Retort	Sulfides
Barium	Cyanides (Total)	Mercury-All Others	Thallium
Beryllium	Cyanides (Amenable)	Nickel	



Pacific
Resource
Recovery

3150 East Pico Boulevard, Los Angeles, CA 90023
Phone (800) 499-7145 Fax (213) 780-0078

LAND DISPOSAL RESTRICTION NOTIFICATION

Manifest Line #	Approval #	Manifest Line #	Approval #	Manifest Line #	Approval #
1	27100012				

This notification form shall be completed by the generator and shall accompany each shipment of restricted waste subject to the Land Disposal Restrictions (40 CFR 268 Subpart C).

- Complete all information in Section I.
- Check mark all appropriate Regulated Constituents in Section II, additional applicable Sections and/or complete Section III.
- Sign and date Section IV.

SECTION I

GENERATOR'S NAME	SPACEX						
EPA I.D. NUMBER	CAR000191536						
MANIFEST NUMBER	000765383						
TREATABILITY GROUP	(Check one) <input checked="" type="checkbox"/> Wastewater <input type="checkbox"/> Non-Wastewater						
HAZARDOUS DEBRIS	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
EPA HAZARDOUS WASTE CODE(S) -							
D001	F003	F005					
<input checked="" type="checkbox"/> There are no underlying hazardous constituents of concern, or <input checked="" type="checkbox"/> There are underlying hazardous constituents of concern which do not meet the treatment standards of 40 CFR 268.48, Table UTS - Universal Treatment Standards (see Section II).							
I have used the following to make the above determination: <input checked="" type="checkbox"/> Knowledge of the waste producing process, raw materials used and reaction products, or <input type="checkbox"/> Results of analysis for the constituents in Table UTS.							
Waste analysis data attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No							

NON-RCRA WASTE

Effective 1/31/96 -

Pursuant to Section 25179.6 of the Health and Safety Code, NON-RCRA aqueous and solid waste containing organics has been repealed from Land Disposal Restriction Notification requirements.

☐ LIQUID ☐ SOLID

(Check all that apply)

☐ 11a

☐ 11b

☐ 11c

☐ 11d

☐ other (28a - 28i)

--	--	--	--	--	--	--	--	--	--

UNIVERSAL TREATMENT STANDARDS

SECTION II

The Underlying Hazardous Constituents must be identified for waste streams which carry the EPA Waste Codes F001-F005, F039, D001 (only D001 not treated by RORGS; CMBST or POLYM), D005-D043 (only D005-D043 if treated in Non-CWA, Non-CWA equivalent or Non-SDWA facilities).

The wastes identified on the aforementioned manifest document number and bearing the EPA Hazardous Waste Number(s) identified in Section I are subject to the Land Disposal Restrictions of 40 CFR 268 Subpart C. The wastes do not meet the applicable treatment standards specified in 40 CFR 268 Subpart D or exceeds the applicable prohibition levels specified in 40 CFR 268.32 (California list wastes) or RCRA Section 3004(d). In compliance with the requirements of 40 CFR 268.7 and 268.9 we are indicating below the applicable constituents of concern.

40 CFR 268.48 TABLE UTS - UNIVERSAL TREATMENT STANDARDS (Continued)

Regulated constituent - common name	CAS ¹ NO.	Wastewater standard concentration in mg/l ²	Non-wastewater standard concentration in mg/kg ³ unless noted as "mg/l TCLP"	Regulated constituent - common name	CAS ¹ NO.	Wastewater standard concentration in mg/l ²	Non-wastewater standard concentration in mg/kg ³ unless noted as "mg/l TCLP"	Regulated constituent - common name	CAS ¹ NO.	Wastewater standard concentration in mg/l ²	Non-wastewater standard concentration in mg/kg ³ unless noted as "mg/l TCLP"
Acenaphthylene	208-96-8	0.059	3.4	m-Dichlorobenzene	541-73-1	0.036	6	p-Nitroaniline	100-01-6	0.028	28
Acenaphthene	83-32-9	0.059	3.4	o-Dichlorobenzene	95-50-1	0.088	6	o-Nitroaniline	88-74-4	0.27	14
Acetone	67-64-1	0.28	160	p-Dichlorobenzene	106-46-7	0.090	6	Nitrobenzene	98-95-3	0.068	14
Acetonitrile	75-05-8	5.6	1.8	Dichlorodifluoromethane	75-71-8	0.23	7.2	5-Nitro-o-toluidine	99-55-8	0.32	28
Acetophenone	96-86-2	0.010	9.7	1,1-Dichloroethane	75-34-3	0.059	6	o-Nitrophenol	88-75-5	0.28	13
2-Acetylaminofluorene	53-96-3	0.059	140	1,2-Dichloroethane	107-06-2	0.21	6	p-Nitrophenol	100-02-7	0.12	29
Acrolein	107-02-8	0.29	NA	1,1,1-Trichloroethylene	75-34-4	0.025	6	N-Nitrosodimethylamine	55-18-5	0.40	28
Acrylamide	79-06-1	19	23	trans-1,2-Dichloroethylene	156-60-5	0.054	30	N-Nitrosodimethylamine	62-75-9	0.40	2.3
Acrylonitrile	107-13-1	0.24	84	2,4-Dichlorophenol	120-83-2	0.044	14	N-Nitroso-di-n-butylamine	924-16-3	0.40	17
Aldrin	309-00-2	0.021	0.066	2,6-Dichlorophenol	87-65-0	0.044	14	N-Nitrosomethyl ethylamine	10595-95-6	0.40	2.3
4-Aminobiphenyl	92-67-1	0.13	NA	1,2-Dichloropropane	78-87-5	0.85	18	N-Nitrosomorpholine	59-89-2	0.40	2.3
Aniline	62-53-3	0.81	14	cis-1,3-Dichloropropylene	10061-01-5	0.036	18	N-Nitrosopiperidine	100-75-4	0.013	35
Anthracene	120-12-7	0.059	3.4	trans-1,3-Dichloropropylene	10061-02-6	0.036	18	N-Nitrosopyrrolidine	930-55-2	0.013	35
Aramite	140-57-8	0.36	NA	Dieldrin	60-57-1	0.017	0.13	Parathion	56-38-2	0.014	4.6
alpha-BHC	319-84-6	0.00014	0.066	Diethyl phthalate	84-66-2	0.20	28	Pentachlorobenzene	608-93-5	0.055	10
beta-BHC	319-85-7	0.00014	0.066	p-Dimethylaminoazobenzene	60-11-7	0.13	NA	Pentachlorodibenzo-furans	NA	0.000035	0.001
delta-BHC	319-86-8	0.023	0.066	2,4-Dimethyl phenol	105-67-9	0.035	14	Pentachlorodibenzo-p-dioxins	NA	0.000063	0.001
gamma-BHC	58-89-9	0.0017	0.066	Dimethyl phthalate	131-11-3	0.047	28	Pentachloroethane	76-01-7	0.055	6
Benz(a)anthracene	56-55-3	0.059	3.4	Di-n-butyl phthalate	84-74-2	0.057	28	Pentachloronitrobenzene	82-68-8	0.055	4.8
Benzal chloride	98-87-3	0.055	6.0	1,4-Dinitrobenzene	100-25-4	0.32	2.3	Pentachlorophenol	87-86-5	0.089	7.4
Benzene	71-43-2	0.14	10	4,6-Dinitro-o-cresol	534-52-1	0.28	160	Phenacetin	62-44-2	0.081	16
Benzo(a)pyrene	50-32-8	0.061	3.4	2,4-Dinitrophenol	51-28-5	0.12	160	Phenanthrene	85-01-8	0.059	5.6
Benzo(b)fluoranthene	205-99-2	0.11	6.8	2,4-Dinitrotoluene	121-14-2	0.32	140	Phenol	108-95-2	0.039	6.2
Benzo(g,h,i)perylene	191-24-2	0.0055	1.8	2,6-Dinitrotoluene	606-20-2	0.55	28	Phorate	298-02-2	0.021	4.6
Benzo(k)fluoranthene	207-08-9	0.11	6.8	Di-n-octyl phthalate	117-84-0	0.017	28	Phthalic acid	100-21-0	0.055	28
bis-(2-Chloroethoxy) methane	111-91-1	0.036	7.2	Di-n-propylnitrosamine	621-64-7	0.40	14	Phthalic anhydride	85-44-9	0.055	28
bis-(2-Chloroethyl) ether	111-44-4	0.033	6.0	Diphenylamine	122-39-4	0.92	13	Promamide	23950-58-5	0.093	1.5
bis-(Chloroisopropyl) ether	108-60-1	0.055	7.2	1,2-Diphenylhydrazine	122-66-7	0.087	NA	Propanenitrile (Ethyl cyanide)	107-12-0	0.24	360
bis-(Ethylhexyl) phthalate	117-81-7	0.28	28	Diphenylnitrosamine	86-30-6	0.92	13	Pyrene	129-00-0	0.067	8.2
Bromodichloromethane	75-27-4	0.35	15	1,4-Dioxane	123-91-1	NA	170	Pyridine	110-86-1	0.014	18
Bromomethane (methyl bromide)	74-83-9	0.11	15	p-Dimethylaminoazobenzene	60-11-7	0.13	NA	Safrole	94-59-7	0.081	22
4-Bromophenyl phenyl ether	101-55-3	0.055	15	Disulfoton	298-04-4	0.017	6.2	Silvex (2,4,5-TP)	93-72-1	0.72	7.9
n-Butyl alcohol	71-36-3	5.6	2.6	Endosulfan I	939-98-8	0.023	0.066	2,4,5-T	93-76-5	0.72	7.9
Butyl benzyl phthalate	85-58-7	0.017	28	Endosulfan II	33213-68-5	0.029	0.13	1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
2-sec-Butyl-4,6-dinitrophenol dinosorb	88-85-7	0.066	2.5	Endosulfan sulfate	1-31-07-8	0.029	0.13	Tetrachlorodibenzo-furans	NA	0.000063	0.001
Carbon disulfide	75-15-0	3.8	4.8 TCLP	Endrin	72-20-8	0.0028	0.13	Tetrachlorodibenzo-p-dioxins	NA	0.000063	0.001
Carbon tetrachloride	56-23-5	0.057	6.0	Endrin aldehyde	7421-93-4	0.025	0.13	1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
Chlordane (alpha & gamma isomers)	57-74-9	0.0033	0.26	Ethyl acetate	141-78-6	0.34	33	1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
p-Chloroaniline	106-47-8	0.46	16	Ethyl benzene	100-41-4	0.057	10	Tetrachloroethylene	127-18-4	0.056	6.0
Chlorobenzene	106-90-7	0.057	6.0	Ethyl ether	60-29-7	0.12	160	2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
Chlorobenzilate	510-15-6	0.10	NA	Ethyl methacrylate	97-63-2	0.14	160	Toluene	108-88-3	0.080	10
2-Chloro-1,3-butadiene	126-99-8	0.057	0.28	Ethylene oxide	75-21-8	0.12	NA	Toxaphene	8001-35-2	0.0095	2.6
Chlorodibromomethane	124-48-1	0.057	15	Famphur	52-85-7	0.017	15	Tribromomethane (bromoform)	75-25-2	0.63	15
Chloroethane	75-00-3	0.27	6.0	Fluoranthene	206-44-0	0.068	3.4	1,2,4-Trichlorobenzene	120-82-1	0.055	19
Chloroform	67-66-3	0.046	6.0	Fluorene	86-73-7	0.059	3.4	1,1,1-Trichloroethane	71-55-6	0.054	6.0
p-Chloro-m-cresol	59-50-7	0.018	14	Heptachlor	76-44-8	0.0012	0.066	1,1,2-Trichloroethane	79-00-5	0.054	6.0
2-Chloroethyl vinyl ether	110-75-8	0.062	NA	Heptachlor epoxide	1024-57-3	0.016	0.066	Trichloroethylene	79-01-6	0.054	6.0
Chloromethane (methyl chloride)	74-87-3	0.19	30	Hexachlorobenzene	118-74-1	0.055	10	Trichloromonofluoromethane	75-69-4	0.020	30
2-Chloronaphthalene	91-8-7	0.055	5.6	Hexachlorobutadiene	87-68-3	0.055	5.6	2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2-Chlorophenol	95-57-8	0.044	5.7	Hexachlorodibenzo-furans	NA	0.000063	0.001	2,4,6-Trichlorophenol	88-06-2	0.035	7.4
3-Chloropropylene	107-05-1	0.036	30	Hexachlorodibenzo-p-dioxins	NA	0.000063	0.001	1,2,3-Trichloropropane	96-18-4	0.85	30
Chrysene	218-01-9	0.059	3.4	Hexachlorocyclopentadiene	77-47-4	0.057	2.4	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.057	30
p-Cresol	106-44-5	0.77	5.6	Hexachloroethane	67-72-1	0.055	30	Vinyl chloride	75-01-4	0.27	6.0
m-Cresol	108-39-4	0.77	5.6	Hexachloropropylene	1888-71-7	0.035	30	Xylenes (total)	1330-20-7	0.32	30
o-Cresol	95-48-7	0.11	5.6	Indena (1,2,3-c,d)pyrene	193-39-5	0.0055	3.4	Total PCBs	1336-36-3	0.1	10
Cyclohexanone	108-94-1	0.36	0.75 TCLP	Iodomethane	74-88-4	0.19	65	Anilmony	7440-36-0	1.9	0.07 TCLP
2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	0.72	10	Isodrin	465-73-6	0.021	0.066	Arsenic	7440-38-2	1.4	5.0 TCLP
o,p'-DDD	53-19-0	0.023	0.087	Isosafrole	120-58-1	0.081	2.6	Barium	7440-39-3	1.2	21 TCLP
p,p'-DDD	72-54-8	0.023	0.087	Kepon	143-50-8	0.0011	0.13	Beryllium	7440-41-7	0.82	0.02 TCLP
o,p'-DDE	3424-82-6	0.031	0.087	Methacrylonitrile	126-98-7	0.24	84	Cadmium	7440-43-9	0.69	0.2 TCLP
p,p'-DDE	72-55-9	0.031	0.087	Methanol	67-56-1	5.6	0.75 TCLP	Chromium (total)	7440-47-3	2.77	0.85 TCLP
o,p'-DDT	789-02-6	0.0039	0.087	Methapyrene	91-80-5	0.081	1.5	Cyanide (total)	57-12-5	1.2	590 ⁴
p,p'-DDT	50-29-3	0.0039	0.087	Methoxychlor	72-43-5	0.25	0.18	Cyanide (amenable)	57-12-5	0.86	30 ⁴
Dibenzo(a,e)pyrene	192-65-4	0.061	NA	3-Methylchloanthrene	56-49-5	0.0055	15	Fluoride	16964-48-8	35	NA
Dibenzo(a,h)anthracene	53-70-3	0.055	8.2	4,4-Methylene-bis-(2-chloroaniline)	101-14-4	0.50	30	Lead	7439-92-1	0.69	0.75 TCLP
tris-(2,3-Dibromopropyl) phosphate	126-72-7	0.11	0.10	Methylene chloride	75-09-2	0.089	30	Mercury - NWW from Refort	7439-97-8	0.15	0.20 TCLP
1,2-Dibromo-3-Chloropropane	96-12-8	0.11	15	Methyl ethyl ketone	78-93-3	0.28	36	Mercury - all others	7439-97-6	0.15	0.025 TCLP
1,2-Dibromoethane (ethylene dibromide)	106-93-4	0.028	15	Methyl isobutyl ketone	108-10-1	0.14	33	Nickel	7440-02-0	3.98	13.6 TCLP
Dibromomethane	74-95-3	0.11	15	Methyl methacrylate	80-62-6	0.14	160	Selenium ⁵	7782-49-2	0.82	5.7 TCLP
				Methyl methanesulfonate	66-27-3	0.018	NA	Silver	7440-22-4	0.43	0.11 TCLP
				Methyl Parathion	298-00-0	0.014	4.6	Sulfide	8496-25-8	14.0	NA
				Naphthalene	91-20-3	0.059	5.6	Thallium	7440-28-0	1.4	0.20 TCLP
				2-Naphthylamine	91-59-8	0.52	NA	Vanadium ⁶	7440-62-2	4.3	1.6 TCLP
								Zinc ⁶	7440-66-6	2.61	4.3 TCLP

40 CFR 268.48 TABLE UTS – UNIVERSAL TREATMENT STANDARDS (Continued)

¹CAS means Chemical Abstract Services. When the waste code and/or regulated constituents are described as a combination of a chemical with its salts and/or esters, the CAS number is given for the parent compound only.

²Concentration standards for wastewaters are expressed in mg/l are based on analysis of composite samples.

³Except for Cyanides (Total and Amenable) the non-wastewater treatment standards expressed as a concentration were established, in part, based upon incineration in units operated in accordance with the technical requirements of 40 CFR part 264, subpart 0 or 40 CFR part 265, subpart 0, or based upon combustion in fuel substitution units operating in accordance with applicable technical requirements. A facility may comply with these treatments standards according to provisions in 40 CFR 268.40(d). All concentration standards for nonwastewaters are based on analysis of grab samples.

⁴Both Cyanides (Total) and Cyanides (Amenable) for non-wastewaters are to be analyzed using Method 9010 or 9012, found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication SW-846, as incorporated by reference in 40 CFR 260.11, with a sample size of 10 grams and a distillation time of one hour and 15 minutes.

⁵These constituents are not "underlying hazardous constituents" in characteristic wastes, according to the definition at §268.2 (i).

⁶Between August 26, 1996, and August 26, 1997, these constituents are not "underlying hazardous constituents" as defined at §268.2 (i) of this Part.

Note: NA means not applicable.

Please complete as applicable:

Wastes with organic constituents having treatment standards expressed as concentration levels based in whole or in part on the analytical detection limit alternative specified in §268.40(d).

- ☐ I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the non-wastewater organic constituents have been treated by combustion units as specified in 268.42. Table 1. I have been unable to detect the non-wastewater organic constituents, despite having used best good-faith efforts to analyze for such constituents. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

Wastes with treatment standards expressed as concentrations in the waste extract Toxicity Characteristic Leaching Procedure (TCLP).

- ☐ I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the treatment standards specified in 40 CFR 268.40 without impermissible dilution of the prohibited waste. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

☐ Alternative Treatment Standard Lab Pack

Manifest Line No.

- ☐ I certify under penalty of law that I personally have examined and am familiar with the waste and that the lab pack contains only wastes that have not been excluded under Appendix IV to 40 CFR Part 268 and that this lab pack will be sent to a combustion facility in compliance with the alternative treatment standards for lab packs at 40 CFR 268.42(c). I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment.

- ☐ I hereby certify under penalty of law that there are no PCBs (polychlorinated biphenyls) contained in the oil waste being manifested to Pacific Resource Recovery. I also understand that a sample of the load will be retained and that the generator will be responsible for the clean-up of contaminated equipment, tanks, etc. if PCBs are present in the waste.

Benzene NESHAP Control Requirement:

For Chemical Manufacturers, Petroleum Refineries, Coke By-Product Facilities and RCRA TSDFs handling wastes subject to 40 CFR 61 subpart FF ONLY:

- ☐ This waste is a "Controlled Benzene Waste" which is subject to the notification requirements of 40 CFR 61 Subpart FF.

Manifest Line No.

California List Wastes:

- ☐ Liquid hazardous wastes having a pH less than or equal to 2.0
- ☐ Liquid hazardous wastes containing PCBs at a concentration greater than or equal to 50 ppm
- ☐ Liquid hazardous wastes that contain HOCs in total concentration greater than or equal to 1000 mg/l
- ☐ Nontliquid hazardous wastes containing HOCs in total concentration greater than or equal to 1000 mg/kg
- ☐ Free (amenable to chlorination) cyanides greater than or equal to 1000 mg/l
- ☐ One or more of the following metals greater than or equal to the following:
- Arsenic and/or compounds: 500 mg/l
 - Cadmium and/or compounds: 100 mg/l
 - Chromium and/or compounds: 500 mg/l
 - Lead and/or compounds: 500 mg/l
 - Mercury and/or compounds: 20 mg/l
 - Nickel and/or compounds: 134 mg/l
 - Selenium and/or compounds: 100 mg/l
 - Thallium and/or compounds: 130 mg/l

ADDITIONAL RESTRICTED WASTE IDENTIFICATION/ TREATMENT STANDARDS AND CERTIFICATION FORM

SECTION III

Complete Section III if the restricted wastes (i.e., EPA Hazardous Waste Code) as listed in Section I do not meet the applicable treatment standards in 40 CFR 268.40 (Treatment Standards for Hazardous Wastes) and have not been identified as required in Section II.

[illegible]

GRILLION

I hereby certify that all information submitted in this and all associated documents is complete and accurate to the best of my knowledge and information.

Company Name: SPACEX

Authorized Signature: Virginia Taylor ON BEHALF OF SPACEX

Printed Name: VIRGINIA ALEJANDREZ

Date: 8/13/09

Siemens Water Technologies Corp.

LAND DISPOSAL RESTRICTION NOTIFICATION FORM

Pursuant to CCR Title 22, Section 66268.7(40 CFR 268.7(a), I hereby notify that this waste shipment contains one or more of the following wastes restricted under the land disposal restrictions for which applicable treatment standards are set forth in CCR Title 22, Section 66268.40 (40 CFR 268.40)

Manifest Num# 000765195JJK Generator Name : SPACE EXPLORATION EPA# CAR000191536

RCRA HAZARDOUS WASTE INFORMATION

U.S.F. PROFILE NUMBER/ MANIFEST LINE ITEM NUMBER	List all D, F, K, U & P Codes	Subcategory (IF ANY)	WASTEWATER*/ NONWASTEWATER WW NWW	California List ** Per CCR Title 22, Section 66268.32	Hazardous Debris Subject To CCR Title 22, Sec 66268.45
2)35072847B			<input type="checkbox"/> WW <input checked="" type="checkbox"/> NWW	<input type="checkbox"/> For: _____	<input type="checkbox"/>
			<input type="checkbox"/> WW <input type="checkbox"/> NWW	<input type="checkbox"/> For: _____	<input type="checkbox"/>
			<input type="checkbox"/> WW <input type="checkbox"/> NWW	<input type="checkbox"/> For: _____	<input type="checkbox"/>
			<input type="checkbox"/> WW <input type="checkbox"/> NWW	<input type="checkbox"/> For: _____	<input type="checkbox"/>

ADDITIONAL INFORMATION FOR D001, D002, D012-43, F001-5 & F039 WASTE STREAMS: (check one)

- ☒ There are no underlying hazardous constituents (UHCs) present
- ☐ There are underlying hazardous constituents (UHCs) present which do not meet treatment standards per CCR Title 22, Section 66268.48
(Use the attached UTS Table and check the appropriate constituent(s) present in the waste stream)

DETERMINATION BASED UPON : (check one)

- ☒ Knowledge of the process generating the waste and the raw materials used and the reaction products
- ☐ Results from analytical testing Analytical results attached ☐ YES ☐ NO

TERM DEFINITIONS:

* **WASTEWATER** = per CCR Title 22, Section 66260.10, WASTE THAT CONTAINS LESS THAN 1% BY WEIGHT TOTAL TOXIC ORGANICS (TOCs) AND 1% BY WEIGHT TOTAL SUSPENDED SOLIDS (TSS).

* **CALIFORNIA LIST** = THE FOLLOWING HAZARDOUS WASTES ARE PROHIBITED FROM LAND DISPOSAL: per CCR Title 22, Section 66268.32

- Liquid hazardous waste with a pH less than or equal to 2.0
- Liquid hazardous waste containing PCB's at concentration of greater than or equal to 50 ppm
- Liquid hazardous waste, including free liquids associated with any solids/sludge, containing free cyanide at concentrations greater than or equal to 1,000 mg/L
- Liquid hazardous waste, including free liquids associated with any solids/sludge, containing metals at concentrations greater than or equal to the following:

ARSENIC	500 mg/L	MERCURY	20 mg/L
CADMIUM	100 mg/L	NICKEL	134 mg/L
CHROMIUM	500 mg/L	SELENIUM	100 mg/L
LEAD	500 mg/L	THALLIUM	130 mg/L
- Liquid hazardous waste, that contains HOC's in total concentration greater than or equal to 1,000 mg/L
- Non-liquid RCRA hazardous waste containing HOC's in total concentration greater than or equal to 1,000 mg/L

CERTIFICATION

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification. I believe that the information I have submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment

SPACE EXPLORATION

COMPANY NAME

AUTHORIZED SIGNATURE

03/11/09

DATE



Pacific
Resource
Recovery

3150 East Pico Boulevard, Los Angeles, CA 90023
Phone (800) 499-7145 Fax (213) 780-0078

LAND DISPOSAL RESTRICTION NOTIFICATION

Manifest Line #	Approval #	Manifest Line #	Approval #	Manifest Line #	Approval #
1	28060111				

This notification form shall be completed by the generator and shall accompany each shipment of restricted waste subject to the Land Disposal Restrictions (40 CFR 268 Subpart C).

- Complete all information in Section I.
- Check mark all appropriate Regulated Constituents in Section II, additional applicable Sections and/or complete Section III.
- Sign and date Section IV.

SECTION I

GENERATOR'S NAME	SPACEX						
EPA I.D. NUMBER	CAR000191536						
MANIFEST NUMBER	000765126 JSH						
TREATABILITY GROUP	(Check one) <input type="checkbox"/> Wastewater <input checked="" type="checkbox"/> Non-Wastewater						
HAZARDOUS DEBRIS	<input type="checkbox"/> Yes <input type="checkbox"/> No						
EPA HAZARDOUS WASTE CODE(S) -							
D001	F003	F005					
<input type="checkbox"/> There are no underlying hazardous constituents of concern, or							
<input checked="" type="checkbox"/> There are underlying hazardous constituents of concern which do not meet the treatment standards of 40 CFR 268.48, Table UTS - Universal Treatment Standards (see Section II).							
I have used the following to make the above determination:							
<input checked="" type="checkbox"/> Knowledge of the waste producing process, raw materials used and reaction products, or							
<input type="checkbox"/> Results of analysis for the constituents in Table UTS.							
Waste analysis data attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No							

NON-RCRA WASTE

☐ LIQUID ☐ SOLID

Effective 1/31/96 -

Pursuant to Section 25179.6 of the Health and Safety Code, NON-RCRA aqueous and solid waste containing organics has been repealed from Land Disposal Restriction Notification requirements.

(Check all that apply)

☐ 11a

☐ 11b

☐ 11c

☐ 11d

☐ other (28a - 28i)

--	--	--	--	--	--	--	--	--	--

UNIVERSAL TREATMENT STANDARDS

SECTION II

The Underlying Hazardous Constituents must be identified for waste streams which carry the EPA Waste Codes F001-F005, F039, D001 (only D001 not treated by RORGS; CMBST or POLYM), D005-D043 (only D005-D043 if treated in Non-CWA, Non-CWA equivalent or Non-SDWA facilities).

The wastes identified on the aforementioned manifest document number and bearing the EPA Hazardous Waste Number(s) identified in Section I are subject to the Land Disposal Restrictions of 40 CFR 268 Subpart C. The wastes do not meet the applicable treatment standards specified in 40 CFR 268 Subpart D or exceeds the applicable prohibition levels specified in 40 CFR 268.32 (California list wastes) or RCRA Section 3004(d). In compliance with the requirements of 40 CFR 268.7 and 268.9 we are indicating below the applicable constituents of concern.

40 CFR 268.48 TABLE UTS - UNIVERSAL TREATMENT STANDARDS (Continued)

Regulated constituent - common name	CAS ¹ NO.	Wastewater standard concentration in mg/l ²	Non-wastewater standard concentration in mg/kg unless noted as "mg/l TCLP"	Regulated constituent - common name	CAS ¹ NO.	Wastewater standard concentration in mg/l ²	Non-wastewater standard concentration in mg/kg unless noted as "mg/l TCLP"	Regulated constituent - common name	CAS ¹ NO.	Wastewater standard concentration in mg/l ²	Non-wastewater standard concentration in mg/kg unless noted as "mg/l TCLP"
□ Acenaphthylene	208-96-8	0.059	3.4	□ m-Dichlorobenzene	541-73-1	0.036	6	□ p-Nitroaniline	100-01-6	0.028	28
□ Acenaphthene	83-32-9	0.059	3.4	□ o-Dichlorobenzene	95-50-1	0.088	6	□ o-Nitroaniline	88-74-4	0.27	14
□ Acetone	67-64-1	0.28	160	□ p-Dichlorobenzene	106-46-7	0.090	6	□ Nitrobenzene	98-95-3	0.068	14
□ Acetonitrile	75-05-8	5.6	1.8	□ Dichlorodifluoromethane	75-71-8	0.23	7.2	□ 5-Nitro-o-toluidine	99-55-8	0.32	28
□ Acetophenone	96-86-2	0.010	9.7	□ 1,1-Dichloroethane	75-34-3	0.059	8	□ o-Nitrophenol	88-75-5	0.28	13
□ 2-Acetylaminofluorene	53-96-3	0.059	140	□ 1,2-Dichloroethane	107-06-2	0.21	6	□ p-Nitrophenol	100-02-7	0.12	29
□ Acrolein	107-02-8	0.29	NA	□ 1,1-Dichloroethylene	75-34-4	0.025	6	□ N-Nitrosodiethylamine	55-18-5	0.40	28
□ Acrylamide	79-06-1	19	23	□ trans-1,2-Dichloroethylene	156-60-5	0.054	30	□ N-Nitrosodimethylamine	62-75-9	0.40	2.3
□ Acrylonitrile	107-13-1	0.24	84	□ 2,4-Dichlorophenol	120-83-2	0.044	14	□ N-Nitroso-di-n-butylamine	924-16-3	0.40	17
□ Aldrin	309-00-2	0.021	0.066	□ 2,6-Dichlorophenol	87-63-0	0.044	14	□ N-Nitrosomethylethylamine	10595-95-6	0.40	2.3
□ 4-Aminobiphenyl	92-87-1	0.13	NA	□ 1,2-Dichloropropane	78-87-5	0.85	18	□ N-Nitrosomorpholine	59-89-2	0.40	2.3
□ Aniline	62-53-3	0.81	14	□ cis-1,3-Dichloropropylene	10061-01-5	0.036	18	□ N-Nitrosopiperidine	100-75-4	0.013	35
□ Anthracene	120-12-7	0.059	3.4	□ trans-1,3-Dichloropropylene	10061-02-6	0.036	18	□ N-Nitrosopyrrolidine	930-55-2	0.013	35
□ Aramite	140-57-8	0.36	NA	□ Dieldrin	60-57-1	0.017	0.13	□ Parathion	56-38-2	0.014	4.6
□ alpha-BHC	319-84-6	0.00014	0.066	□ Diethyl phthalate	84-66-2	0.20	28	□ Pentachlorobenzene	608-93-5	0.055	10
□ beta-BHC	319-85-7	0.00014	0.066	□ p-Dimethylaminoazobenzene	60-11-7	0.13	NA	□ Pentachlorodibenzo-furans	NA	0.000035	0.001
□ delta-BHC	319-86-8	0.023	0.066	□ 2,4-Dimethyl phenol	105-67-9	0.036	14	□ Pentachlorodibenzo-p-dioxins	NA	0.000083	0.001
□ gamma-BHC	58-89-9	0.0017	0.066	□ Dimethyl phthalate	131-11-3	0.047	28	□ Pentachloroethane	76-01-7	0.055	6
□ Benz(a)anthracene	58-55-3	0.059	3.4	□ Di-n-butyl phthalate	84-74-2	0.057	26	□ Pentachloronitrobenzene	82-88-8	0.055	4.6
□ Benzal chloride	98-87-3	0.055	6.0	□ 1,4-Dinitrobenzene	100-25-4	0.32	2.3	□ Pentachlorophenol	87-86-5	0.089	7.4
□ Benzene	71-43-2	0.14	10	□ 4,6-Dinitro-o-cresol	534-52-1	0.28	160	□ Phenacetin	62-44-2	0.081	16
□ Benzo(a)pyrene	50-32-8	0.061	3.4	□ 2,4-Dinitrophenol	51-28-5	0.12	160	□ Phenanthrene	85-01-8	0.059	5.6
□ Benzo(b)fluoranthene	205-99-2	0.11	6.8	□ 2,4-Dinitrotoluene	121-14-2	0.32	140	□ Phenol	108-95-2	0.039	6.2
□ Benzo(g,h,i)perylene	191-24-2	0.0055	1.8	□ 2,6-Dinitrotoluene	606-20-2	0.55	28	□ Phorate	298-02-2	0.021	4.6
□ Benzo(k)fluoranthene	207-08-9	0.11	6.8	□ Di-n-octyl phthalate	117-84-0	0.017	28	□ Phthalic acid	100-21-0	0.055	28
□ bis-(2-Chloroethoxy) methane	111-91-1	0.036	7.2	□ Di-n-propylnitrosamine	621-64-7	0.40	14	□ Phthalic anhydride	85-44-9	0.055	26
□ bis-(2-Chloroethyl) ether	111-44-4	0.033	6.0	□ Diphenylamine	122-39-4	0.92	13	□ Pronamide	23950-58-5	0.093	1.5
□ bis-(Chloroisopropyl) ether	108-60-1	0.055	7.2	□ 1,2-Diphenylhydrazine	122-66-7	0.087	NA	□ Propanenitrile (Ethyl cyanide)	107-12-0	0.24	360
□ bis-(Ethylhexyl) phthalate	117-81-7	0.28	28	□ Diphenyltinrosamine	86-30-6	0.92	13	□ Pyrene	129-00-0	0.067	8.2
□ Bromodichloromethane	75-27-4	0.35	15	□ 1,4-Dioxane	123-91-1	NA	170	□ Pyridine	110-86-1	0.014	16
□ Bromomethane (methyl bromide)	74-83-9	0.11	15	□ p-Dimethylaminoazobenzene	60-11-7	0.13	NA	□ Saffrole	94-59-7	0.081	22
□ 4-Bromophenyl phenyl ether	101-55-3	0.055	15	□ Disulfoton	298-04-4	0.017	6.2	□ Silvex (2,4,5-TP)	93-72-1	0.72	7.9
□ n-Butyl alcohol	71-36-3	5.6	2.6	□ Endosulfan I	939-88-8	0.023	0.066	□ 2,4,5-T	93-76-5	0.72	7.9
□ Butyl benzyl phthalate	85-68-7	0.017	26	□ Endosulfan II	33213-6-5	0.029	0.13	□ 1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
□ 2-sec-Butyl-4,6-dinitrophenol dioxeb	88-85-7	0.066	2.5	□ Endosulfan sulfate	1-31-07-8	0.029	0.13	□ Tetrachlorodibenzo-furans	NA	0.000063	0.001
□ Carbon disulfide	75-15-0	3.8	4.8 TCLP	□ Endrin	72-20-8	0.0028	0.13	□ Tetrachlorodibenzo-p-dioxins	NA	0.000063	0.001
□ Carbon tetrachloride	56-23-5	0.057	6.0	□ Endrin aldehyde	7421-93-4	0.025	0.13	□ 1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
□ Chlordane (alpha & gamma isomers)	57-74-9	0.0033	0.26	□ Ethyl acetate	141-78-6	0.34	33	□ 1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
□ p-Chloroaniline	106-47-8	0.46	16	□ Ethyl benzene	100-41-4	0.057	10	□ Tetrachloroethylene	127-18-4	0.058	6.0
□ Chlorobenzene	108-90-7	0.057	6.0	□ Ethyl ether	60-29-7	0.12	160	□ 2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
□ Chlorobenzilate	510-15-6	0.10	NA	□ Ethyl methacrylate	97-63-2	0.14	160	□ Toluene	108-88-3	0.080	10
□ 2-Chloro-1,3-butadiene	128-99-8	0.057	0.28	□ Ethylene oxide	75-21-8	0.12	NA	□ Toxaphene	8001-35-2	0.0095	2.6
□ Chlorodibromomethane	124-48-1	0.057	15	□ Fampur	52-85-7	0.017	15	□ Tribromomethane (bromofom)	75-25-2	0.63	15
□ Chloroethane	75-00-3	0.27	6.0	□ Fluoranthene	206-44-0	0.068	3.4	□ 1,2,4-Trichlorobenzene	120-82-1	0.055	19
□ Chloroform	67-68-3	0.046	6.0	□ Fluorene	86-73-7	0.059	3.4	□ 1,1,1-Trichloroethane	71-55-6	0.054	6.0
□ p-Chloro-m-cresol	59-50-7	0.018	14	□ Heptachlor	76-44-8	0.0012	0.066	□ 1,1,2-Trichloroethane	79-00-5	0.054	6.0
□ 2-Chloroethyl vinyl ether	110-75-8	0.062	NA	□ Heptachlor epoxide	1024-57-3	0.016	0.066	□ Trichloroethylene	79-01-6	0.054	6.0
□ Chloromethane (methyl chloride)	74-87-3	0.19	30	□ Hexachlorobenzene	118-74-1	0.055	10	□ Trichloromonofluoromethane	75-69-4	0.020	30
□ 2-Chloronaphthalene	91-8-7	0.055	5.6	□ Hexachlorobutadiene	87-68-3	0.055	5.6	□ 2,4,5-Trichlorophenol	95-95-4	0.18	7.4
□ 2-Chlorophenol	95-57-8	0.044	5.7	□ Hexachlorodibenzo-furans	NA	0.000063	0.001	□ 2,4,6-Trichlorophenol	88-06-2	0.035	7.4
□ 3-Chloropropylene	107-05-1	0.036	30	□ Hexachlorodibenzo-p-dioxins	NA	0.000083	0.001	□ 1,2,3-Trichloropropane	96-18-4	0.85	30
□ Chrysene	218-01-9	0.059	3.4	□ Hexachlorocyclopentadiene	77-47-4	0.057	2.4	□ 1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.057	30
□ p-Cresol	106-44-5	0.77	5.6	□ Hexachloropropylene	1888-71-7	0.035	30	□ Vinyl chloride	75-01-4	0.27	6.0
□ m-Cresol	108-39-4	0.77	5.6	□ Lindene (1,2,3-c,d)pyrene	193-39-5	0.0055	3.4	□ Xylenes (total)	1330-20-7	0.32	30
□ o-Cresol	95-48-7	0.11	5.6	□ Isodimethane	74-88-4	0.19	65	□ Total PCBs	1336-36-3	0.1	10
□ Cyclohexanone	108-94-1	0.36	0.75 TCLP	□ Isobutyl alcohol	78-83-1	5.6	170	□ Antimony	7440-36-0	1.9	0.07 TCLP
□ 2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	0.72	10	□ Isodrin	465-73-6	0.021	0.066	□ Arsenic	7440-38-2	1.4	5.0 TCLP
□ o,p'-DDD	53-19-0	0.023	0.087	□ Isosafrole	120-58-1	0.081	2.6	□ Barium	7440-39-3	1.2	21 TCLP
□ p,p'-DDD	72-54-8	0.023	0.087	□ Kepone	143-50-6	0.0011	0.13	□ Beryllium	7440-41-7	0.82	0.02 TCLP
□ o,p'-DDE	3424-82-6	0.031	0.087	□ Methacrylonitrile	126-98-7	0.24	84	□ Cadmium	7440-43-9	0.69	0.2 TCLP
□ p,p'-DDE	72-55-9	0.031	0.087	□ Methanol	67-58-1	5.6	0.75 TCLP	□ Chromium (total)	7440-47-3	2.77	0.85 TCLP
□ o,p'-DDT	789-02-6	0.0039	0.087	□ Methapyrene	91-80-5	0.081	1.5	□ Cyanide (total)	57-12-5	1.2	590*
□ p,p'-DDT	50-29-3	0.0039	0.087	□ Methoxychlor	72-43-5	0.25	0.13	□ Cyanide (amenable)	57-12-5	0.86	30*
□ Dibenzo(a,e)pyrene	192-65-4	0.061	NA	□ 3-Methylchloranthrene	56-49-5	0.0055	15	□ Fluoride	16984-48-8	35	NA
□ Dibenzo(a,h)anthracene	53-70-3	0.055	8.2	□ 4,4-Methylene-bis-(2-chloroaniline)	101-14-4	0.50	30	□ Lead	7439-92-1	0.69	0.75 TCLP
□ Iridis-(2,3-Dibromopropyl) phosphate	126-72-7	0.11	0.10	□ Methylene chloride	75-09-2	0.089	30	□ Mercury - NWW from Retort	7439-97-8	0.15	0.20 TCLP
□ 1,2-Dibromo-3-Chloropropane	96-12-8	0.11	15	□ Methyl ethyl ketone	78-93-3	0.28	38	□ Mercury - all others	7439-97-6	0.15	0.025 TCLP
□ 1,2-Dibromoethane (ethylene dibromide)	106-93-4	0.028	15	□ Methyl isobutyl ketone	108-10-1	0.14	33	□ Nickel	7440-02-0	3.98	13.6 TCLP
□ Dibromomethane	74-95-3	0.11	15	□ Methyl methacrylate	80-62-6	0.14	160	□ Selenium*	7782-49-2	0.82	5.7 TCLP
				□ Methyl methanesulfonate	66-27-3	0.018	NA	□ Silver	7440-22-4	0.43	0.11 TCLP
				□ Methyl Parathion	298-00-0	0.014	4.6	□ Sulfide	8496-25-8	14.0	NA
				□ Naphthalene	91-20-3	0.059	5.6	□ Thallium	7440-28-0	1.4	0.20 TCLP
				□ 2-Naphthylamine	91-59-8	0.52	NA	□ Vanadium*	7440-62-2	4.3	1.6 TCLP
								□ Zinc*	7440-66-6	2.51	4.3 TCLP

40 CFR 268.48 TABLE UTS – UNIVERSAL TREATMENT STANDARDS (Continued)

¹CAS means Chemical Abstract Services. When the waste code and/or regulated constituents are described as a combination of a chemical with its salts and/or esters, the CAS number is given for the parent compound only.

²Concentration standards for wastewaters are expressed in mg/l are based on analysis of composite samples.

³Except for Cyanides (Total and Amenable) the non-wastewater treatment standards expressed as a concentration were established, in part, based upon incineration in units operated in accordance with the technical requirements of 40 CFR part 264, subpart 0 or 40 CFR part 265, subpart 0, or based upon combustion in fuel substitution units operating in accordance with applicable technical requirements. A facility may comply with these treatments standards according to provisions in 40 CFR 268.40(d). All concentration standards for nonwastewaters are based on analysis of grab samples.

⁴Both Cyanides (Total) and Cyanides (Amenable) for non-wastewaters are to be analyzed using Method 9010 or 9012, found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication SW-846, as incorporated by reference in 40 CFR 260.11, with a sample size of 10 grams and a distillation time of one hour and 15 minutes.

⁵These constituents are not "underlying hazardous constituents" in characteristic wastes, according to the definition at §268.2 (i).

⁶Between August 26, 1996, and August 26, 1997, these constituents are not "underlying hazardous constituents" as defined at §268.2 (i) of this Part. Note: NA means not applicable.

Please complete as applicable:

Wastes with organic constituents having treatment standards expressed as concentration levels based in whole or in part on the analytical detection limit alternative specified in §268.40(d).

- ☐ I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the non-wastewater organic constituents have been treated by combustion units as specified in 268.42, Table 1. I have been unable to detect the non-wastewater organic constituents, despite having used best good-faith efforts to analyze for such constituents. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

Wastes with treatment standards expressed as concentrations in the waste extract Toxicity Characteristic Leaching Procedure (TCLP).

- ☐ I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the treatment standards specified in 40 CFR 268.40 without impermissible dilution of the prohibited waste. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

☐ Alternative Treatment Standard Lab Pack

Manifest Line No.

- ☐ I certify under penalty of law that I personally have examined and am familiar with the waste and that the lab pack contains only wastes that have not been excluded under Appendix IV to 40 CFR Part 268 and that this lab pack will be sent to a combustion facility in compliance with the alternative treatment standards for lab packs at 40 CFR 268.42(c). I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment.

- ☐ I hereby certify under penalty of law that there are no PCBs (polychlorinated biphenyls) contained in the oil waste being manifested to Pacific Resource Recovery. I also understand that a sample of the load will be retained and that the generator will be responsible for the clean-up of contaminated equipment, tanks, etc. if PCBs are present in the waste.

Benzene NESHAP Control Requirement:

For Chemical Manufacturers, Petroleum Refineries, Coke By-Product Facilities and RCRA TSDFs handling wastes subject to 40 CFR 61 subpart FF ONLY:

- ☐ This waste is a "Controlled Benzene Waste" which is subject to the notification requirements of 40 CFR 61 Subpart FF.

Manifest Line No.

California List Wastes:

- ☐ Liquid hazardous wastes having a pH less than or equal to 2.0
- ☐ Liquid hazardous wastes containing PCBs at a concentration greater than or equal to 50 ppm
- ☐ Liquid hazardous wastes that contain HOCs in total concentration greater than or equal to 1000 mg/l
- ☐ Nonliquid hazardous wastes containing HOCs in total concentration greater than or equal to 1000 mg/kg
- ☐ Free (amenable to chlorination) cyanides greater than or equal to 1000 mg/l
- ☐ One or more of the following metals greater than or equal to the following:
- Arsenic and/or compounds: 500 mg/l
 - Cadmium and/or compounds: 100 mg/l
 - Chromium and/or compounds: 500 mg/l
 - Lead and/or compounds: 500 mg/l
 - Mercury and/or compounds: 20 mg/l
 - Nickel and/or compounds: 134 mg/l
 - Selenium and/or compounds: 100 mg/l
 - Thallium and/or compounds: 130 mg/l



ADDITIONAL RESTRICTED WASTE IDENTIFICATION/ TREATMENT STANDARDS AND CERTIFICATION FORM

SECRET

EPA Hazardous Waste Code

Subcategory
(if applicable)

Appropriate Treatment Standard

Alternative Treatment Technology (Debris)



Rho Chem Corporation,
a wholly owned subsidiary of PHILIP SERVICES CORP.,
RCRA Land Disposal Restriction Notification Form EZ

Generator: SPACE EXPLORATION TECH. U.S. EPA I.D. #: CAR000191536

Profile # 390575-00 Manifest #: 000765009JJK

The wastes identified on this form are subject to the land disposal restrictions of 40 CFR Part 268. The wastes do not meet the treatment standards specified in 268.32, Subpart D or do not meet the applicable prohibition levels specified in 268.32. Pursuant to 40 CFR 268.7(a), the required information applicable to each waste is identified below (check all boxes that apply):

Treatability Group: ☐ Wastewater ☒ Nonwastewater
(Wastewaters contain less than 1% filterable solids and less than 1% Total Organic Carbon)

D001 Ignitable (except for High TOC) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems
(Complete form UC, unless D001 is the only "D" code and the waste is to be combusted or recovered.)

- ☒ D001 Ignitable (except for High TOC) managed in CWA/ CWA-equivalent/Class I SDWA systems
☐ D001 High TOC Ignitable (greater than 10% total organic carbon)

D002 Corrosive managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems (Complete form UC)

- ☐ D002 Corrosive managed in CWA/ CWA-equivalent/Class I SDWA systems
☐ D003 Reactive Sulfides based on 261.23(a)(5)
☐ D003 Reactive Cyanides based on 261.23(a)(5)

D003 Water Reactives based on 261.23(a)(2),(3) and (4) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems (Complete form UC)

- ☐ D003 Water Reactives based on 261.23(a)(2),(3) and (4) managed in CWA/ CWA-equivalent/Class I SDWA systems
☐ D003 Other Reactives based on 261.23(a)(1) (Complete form UC)

If D004-43 boxes are checked, complete and attach Form UC to address underlying hazardous constituents (unless these wastes are to be managed in CWA/CWA-equivalent/Class I SDWA systems):

- | | | | |
|--|---|---|--|
| <input type="checkbox"/> D004 Arsenic | <input type="checkbox"/> D005 Barium | <input type="checkbox"/> D006 Cadmium | <input type="checkbox"/> D006 Cadmium-containing batteries |
| <input type="checkbox"/> D007 Chromium | <input type="checkbox"/> D008 Lead | <input type="checkbox"/> D008 Lead acid batteries | |
| <input type="checkbox"/> D009 High mercury inorganic (>260 mg/kg total), including incinerator residue and residues from RMERC | | | |
| <input type="checkbox"/> D009 High-mercury organic (>260 mg/kg total), not including incinerator residue | | | |
| <input type="checkbox"/> D009 Low-mercury (<260 mg/kg total) | | <input type="checkbox"/> D009 All D009 wastewaters | |
| <input type="checkbox"/> D010 Selenium | <input type="checkbox"/> D011 Silver | | |
| <input type="checkbox"/> D012 Endrin | <input type="checkbox"/> D023 <i>o</i> -Cresol | <input type="checkbox"/> D033 Hexachlorobutadiene | |
| <input type="checkbox"/> D013 Lindane | <input type="checkbox"/> D024 <i>m</i> -Cresol | <input type="checkbox"/> D034 Hexachloroethane | |
| <input type="checkbox"/> D014 Methoxychlor | <input type="checkbox"/> D025 <i>p</i> -Cresol | <input type="checkbox"/> D035 Methyl ethyl ketone | |
| <input type="checkbox"/> D015 Toxaphene | <input type="checkbox"/> D026 Cresols (Total) | <input type="checkbox"/> D036 Nitrobenzene | |
| <input type="checkbox"/> D016 2,4-D | <input type="checkbox"/> D027 <i>p</i> -Dichlorobenzene | <input type="checkbox"/> D037 Pentachlorophenol | |
| <input type="checkbox"/> D017 2,4,5-TP (Silvex) | <input type="checkbox"/> D028 1,2-Dichloroethane | <input type="checkbox"/> D038 Pyridine | |
| <input type="checkbox"/> D018 Benzene | <input type="checkbox"/> D029 1,1-Dichloroethylene | <input type="checkbox"/> D039 Tetrachloroethylene | |
| <input type="checkbox"/> D019 Carbon tetrachloride | <input type="checkbox"/> D030 2,4-Dinitrotoluene | <input type="checkbox"/> D040 Trichloroethylene | |
| <input type="checkbox"/> D020 Chlordane | <input type="checkbox"/> D031 Heptachlor | <input type="checkbox"/> D041 2,4,5-Trichlorophenol | |
| <input type="checkbox"/> D021 Chlorobenzene | <input type="checkbox"/> D032 Hexachlorobenzene | <input type="checkbox"/> D042 2,4,6-Trichlorophenol | |
| <input type="checkbox"/> D022 Chloroform | | <input type="checkbox"/> D043 Vinyl chloride | |

Note: If any bolded entries are checked, form UC must be completed to address underlying hazardous constituents, unless the material is treated in a Clean Water Act (CWA) treatment process or unless otherwise noted above.

In addition, the following wastes are included in this shipment:

xx F001-F005 spent solvents. (If this box is checked, complete the F001-F005 section on the back of this form. Check the hazardous waste number(s) that applies, and identify the constituents likely to be present in the waste.)

If this shipment carries additional waste codes that are not addressed above, identify them here:

<u>EPA Waste Code</u>	<u>Subcategory (if applicable)</u>	<u>EPA Waste Code</u>	<u>Subcategory (if applicable)</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

F001-F005 Spent Solvents

Check the box(es) that applies; identify the individual constituents likely to be present.

<u>Hazardous waste description</u>	<u>Regulated hazardous constituents</u>	
<input type="checkbox"/> F001 Spent halogenated solvents used in degreasing	Carbon tetrachloride Tetrachloroethylene Trichloroethylene Trichloromonofluoromethane	Methylene chloride 1,1,1-Trichloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane
<input type="checkbox"/> F002 Spent halogenated solvents	Chlorobenzene Methylene chloride 1,1,1-Trichloroethane Trichloroethylene Trichloromonofluoromethane	<i>o</i> -Dichlorobenzene Tetrachloroethylene 1,1,2-Trichloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane
F003 Spent non-halogenated solvents	Acetone Cyclohexanone* Ethyl benzene Methanol* Xylenes (total)	<i>n</i> -Butyl alcohol Ethyl acetate Ethyl ether Methyl isobutyl ketone
<input type="checkbox"/> F004 Spent non-halogenated solvents	<i>m</i> -Cresol <i>p</i> -Cresol Nitrobenzene	<i>o</i> -Cresol Cresol-mixed isomers (cresylic acid)
F005 Spent non-halogenated solvents	Benzene 2-Ethoxyethanol Methyl ethyl ketone Pyridine	Carbon disulfide* Isobutyl alcohol 2-Nitropropane Toluene

*The treatment standards for carbon disulfide, cyclohexanone, and methanol nonwastewaters are based on the TCLP and apply to spent solvent nonwastewaters containing only one, two, or all three of these constituents. The treatment standards for these three constituents do not apply when any of the other F001-F005 constituents are present in the waste.

Hazardous Debris

- ☐ This shipment contains hazardous debris that will be treated to comply with the alternative treatment standards of 268.45 (e.g., macroencapsulation or air blasting).

(The definitions of "debris" and "hazardous debris" are in 40 CFR 268.2. Per 268.45, hazardous debris must be treated for each "contaminant subject to treatment." To determine these, look up the waste code in 268.40 and list the regulated hazardous constituents for each code.)

The contaminants subject to treatment for this debris are identified below:

<u>EPA Waste Code</u>	<u>Subcategory</u>	<u>Contaminants subject to treatment</u>	
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

***Rho Chem Corporation,
a wholly owned subsidiary of PHILIP SERVICES CORP.,
RCRA Land Disposal Restriction Notification Form UC***

Generator: SPACE EXPLORATION TECH. U.S. EPA I.D. #: CAR000191536

Profile #: 390575-00

Manifest #: 000765009JJK

In accordance with 40 CFR 268.7(a), the underlying hazardous constituents must be addressed in this waste. Per 268.2(i), "underlying hazardous constituent" means any constituent listed in 268.48, Table UTS—Universal Treatment Standard which can reasonably be expected to be present at the point of generation of the hazardous waste, at a concentration above the constituent-specific UTS treatment standard. Refer to Form-EZ (attached) for the waste code(s), treatability group, and subcategory applicable to this waste.

In order to address underlying hazardous constituents in characteristic wastes, please check the appropriate box:

- ☐ I have reviewed the UTS list of 268.48, and per 268.7(a), I have determined that there are no underlying hazardous constituents reasonably expected to be present in this waste.
- ☒ I have reviewed the UTS list of 268.48, and per 268.7(a), I have determined that underlying hazardous constituents are present in this waste. The underlying hazardous constituents are identified as follows:

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

The determination of underlying hazardous constituents was based on:

- ☒ Generator's knowledge of the waste
- ☐ Analysis

I certify that I personally have examined and am familiar with the waste through analysis and testing, or through knowledge of the waste to support this certification. I certify that as an authorized representative of the generator named above, all the information submitted in this notification is true and correct to the best of my knowledge.

Araceli Rodriguez
Printed Name

Re - R
Signature

10/17/08
Date

List of Underlying Hazardous Constituents 40 CFR 268.48

Circle or otherwise identify the underlying hazardous constituents present in the waste:

Organic Constituent	Organic Constituent	Organic Constituent	Organic Constituent
A2213	2-Chlorophenol	Ethyl acetate	Oxamyl
Acenaphthylene	3-Chloropropylene	Ethyl benzene	Parathion
Acenaphthene	Chrysene	Ethyl cyanide/Propanenitrile	Total PCBs(sum of all isomers, or all
Aroclors)			
Acetone	<i>o</i> -Cresol	Ethyl ether	Pebulate
Acetonitrile	<i>m</i> -Cresol	bis(2-Ethylhexyl)phthalate	Pentachlorobenzene
Acetophenone	<i>p</i> -Cresol	Ethyl methacrylate	PeCDDs(All Pentachlorodibenzo- <i>p</i> -dioxin
2-Acetylaminofluorene	<i>m</i> -Cumenyl methylcarbamate	Ethylene oxide	PeCDFs(All Pentachlorodibenzofurans)
Acrolein	Cyclohexanone	Famphur	Pentachloroethane
Acrylamide	<i>o,p'</i> -DDD	Fluoranthene	Pentachloronitrobenzene
Acrylonitrile	<i>p,p'</i> -DDD	Fluorene	Pentachlorophenol
Aldicarb sulfone	<i>o,p'</i> -DDE	Formetanate hydrochloride	Phenacetin
Aldrin	<i>p,p'</i> -DDE	Formparanate	Phenanthrene
4-Aminobiphenyl	<i>o,p'</i> -DDT	Heptachlor	Phenol
Aniline	<i>p,p'</i> -DDT	Heptachlor epoxide	<i>o</i> -Phenylenediamine
Anthracene	Dibenz(a,h)anthracene	Hexachlorobenzene	Phorate
Aramite	Dibenz(a,e)pyrene	Hexachlorobutadiene	Phthalic acid
alpha-BHC	1,2-Dibromo-3-chloropropane	Hexachlorocyclopentadiene	Phthalic anhydride
beta-BHC	1,2-Dibromoethane/Ethylene dibromide	HxCDDs(All Hexachlorodibenzo- <i>p</i> -dioxins)	Physostigmine
delta-BHC	Dibromomethane	HxCDFs(All Hexachlorodibenzofurans)	Physostigmine salicylate
gamma-BHC	<i>m</i> -Dichlorobenzene	Hexachloroethane	Promecarb
Barban	<i>o</i> -Dichlorobenzene	Hexachloropropylene	Pronamide
Bendiocarb	<i>p</i> -Dichlorobenzene	Indeno(1,2,3- <i>c,d</i>)pyrene	Propham
Bendiocarb phenol	Dichlorodifluoromethane	Iodomethane	Propoxur
Benomyl	1,1-Dichloroethane	Isobutyl alcohol	Prosulfocarb
Benzene	1,2-Dichloroethane	Isodrin	Pyrene
Benz(a)anthracene	1,1-Dichloroethylene	Isolan	Pyridine
Benzal chloride	<i>trans</i> -1,2-Dichloroethylene	Isosafrole	Safrole
Benzo(b)fluoranthene	2,4-Dichlorophenol	Kepone	Silvex/2,4,5-TP
Benzo(k)fluoranthene	2,6-Dichlorophenol	Methacrylonitrile	1,2,4,5-Tetrachlorobenzene
Benzo(g,h,i)perylene	2,4-Dichlorophenoxyacetic acid/2,4-D	Methanol	TCDDs(All Tetrachlorodibenzo- <i>p</i> -dioxins
Benzo(a)pyrene	1,2-Dichloropropane	Methapyrilene	TCDFs(All Tetrachlorodibenzofurans)
Bromodichloromethane	<i>cis</i> -1,3-Dichloropropylene	Methiocarb	1,1,1,2-Tetrachloroethane
Bromomethane/Methyl bromide	<i>trans</i> -1,3-Dichloropropylene	Methomyl	1,1,2,2-Tetrachloroethane
4-Bromophenyl phenyl ether	Dieldrin	Methoxychlor	Tetrachloroethylene
<i>n</i> -Butyl alcohol	Diethylene glycol, dicarbamate	3-Methylcholanthrene	2,3,4,6-Tetrachlorophenol
Butylate	Diethyl phthalate	4,4-Methylene-bis(2-chloroaniline)	Thiodicarb
Butyl benzyl phthalate	<i>p</i> -Dimethylaminoazobenzene	Methylene chloride	Thiophanate-methyl
2-sec-Butyl-4,6-dinitrophenol/Dinoseb	2,4-Dimethyl phenol	Methyl ethyl ketone	Tirpate
Carbaryl	Dimethyl phthalate	Methyl isobutyl ketone	Toluene
Carbenzadim	Dimetilan	Methyl methacrylate	Toxaphene
Carbofuran	Di- <i>n</i> -butyl phthalate	Methyl methansulfonate	Triallate
Carbofuran phenol	1,4-Dinitrobenzene	Methyl parathion	Tribromomethane/Bromoform
Carbon disulfide	4,6-Dinitro- <i>o</i> -cresol	Metolcarb	2,4,6-Tribromophenol
Carbon tetrachloride	2,4-Dinitrophenol	Mexacarbate	1,2,4-Trichlorobenzene
Carbosulfan	2,4-Dinitrotoluene	Molinate	1,1,1-Trichloroethane
Chlordane (alpha and gamma isomers)	2,6-Dinitrotoluene	Naphthalene	1,1,2-Trichloroethane
<i>p</i> -Chloroaniline	Di- <i>n</i> -octyl phthalate	2-Naphthylamine	Trichloroethylene
Chlorobenzene	Di- <i>n</i> -propylnitrosamine	<i>o</i> -Nitroaniline	Trichloromonofluoromethane
Chlorobenzilate	1,4-Dioxane	<i>p</i> -Nitroaniline	2,4,5-Trichlorophenol
2-Chloro-1,3-butadiene	Diphenylamine	Nitrobenzene	2,4,6-Trichlorophenol
Chlorodibromomethane	Diphenylnitrosamine	5-Nitro- <i>o</i> -toluidine	2,4,5-Trichlorophenoxyacetic acid/2,4,5-T
Chloroethane	1,2-Diphenylhydrazine	<i>o</i> -Nitrophenol	1,2,3-Trichloropropane
bis(2-Chloroethoxy)methane	Disulfoton	<i>p</i> -Nitrophenol	1,1,2-Trichloro-1,2,2-trifluoroethane
bis(2-Chloroethyl)ether	Dithiocarbamates (total)	N-Nitrosodiethylamine	Triethylamine
Chloroform	Endosulfan I	N-Nitrosodimethylamine	tris-(2,3-Dibromopropyl)phosphate
bis(2-Chloroisopropyl)ether	Endosulfan II	N-Nitroso-di- <i>n</i> -butylamine	Vernolate
<i>p</i> -Chloro- <i>m</i> -cresol	Endosulfan sulfate	N-Nitrosomethylethylamine	Vinyl chloride
2-Chloroethyl vinyl ether	Endrin	N-Nitrosomorpholine	Xylenes-mixed isomers
Chloromethane/Methyl chloride concentrations)	Endrin aldehyde	N-Nitrosopiperidine	(sum of <i>o</i> -, <i>m</i> -, and <i>p</i> -xylene
2-Chloronaphthalene	EPTC	N-Nitrosopyrrolidine	
Inorganic Constituent	Inorganic Constituent	Inorganic Constituent	Inorganic Constituent
Antimony	Cadmium	Lead	Silver
Arsenic	Chromium (Total)	Mercury-Nonwastewater from Retort	Sulfides
Barium	Cyanides (Total)	Mercury-All Others	Thallium
Beryllium	Cyanides (Amenable)	Nickel	



Rho Chem Corporation,
a wholly owned subsidiary of PHILIP SERVICES CORP.,
RCRA Land Disposal Restriction Notification Form EZ

Generator: SPACE EXPLORATION TECH. U.S. EPA I.D. #: CAR000191536

Profile # 3905273-00

Manifest #: 000765059JJK

The wastes identified on this form are subject to the land disposal restrictions of 40 CFR Part 268. The wastes do not meet the treatment standards specified in 268.32, Subpart D or do not meet the applicable prohibition levels specified in 268.32. Pursuant to 40 CFR 268.7(a), the required information applicable to each waste is identified below (check all boxes that apply):

Treatability Group: ☐ Wastewater ☒ Nonwastewater
(Wastewaters contain less than 1% filterable solids and less than 1% Total Organic Carbon)

D001 Ignitable (except for High TOC) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems
(Complete form UC, unless D001 is the only "D" code and the waste is to be combusted or recovered.)

☒ D001 Ignitable (except for High TOC) managed in CWA/ CWA-equivalent/Class I SDWA systems

☐ D001 High TOC Ignitable (greater than 10% total organic carbon)

D002 Corrosive managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems (Complete form UC)

☐ D002 Corrosive managed in CWA/ CWA-equivalent/Class I SDWA systems

☐ D003 Reactive Sulfides based on 261.23(a)(5)

☐ D003 Reactive Cyanides based on 261.23(a)(5)

D003 Water Reactives based on 261.23(a)(2),(3) and (4) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems (Complete form UC)

☐ D003 Water Reactives based on 261.23(a)(2),(3) and (4) managed in CWA/ CWA-equivalent/Class I SDWA systems

☐ D003 Other Reactives based on 261.23(a)(1) (Complete form UC)

If D004-43 boxes are checked, complete and attach Form UC to address underlying hazardous constituents (unless these wastes are to be managed in CWA/CWA-equivalent/Class I SDWA systems):

- | | | | |
|--|---|---|--|
| <input type="checkbox"/> D004 Arsenic | <input type="checkbox"/> D005 Barium | <input type="checkbox"/> D006 Cadmium | <input type="checkbox"/> D006 Cadmium-containing batteries |
| <input type="checkbox"/> D007 Chromium | <input type="checkbox"/> D008 Lead | <input type="checkbox"/> D008 Lead acid batteries | |
| <input type="checkbox"/> D009 High mercury inorganic (>260 mg/kg total), including incinerator residue and residues from RMERC | | | |
| <input type="checkbox"/> D009 High-mercury organic (>260 mg/kg total), not including incinerator residue | | | |
| <input type="checkbox"/> D009 Low-mercury (<260 mg/kg total) <input type="checkbox"/> D009 All D009 wastewaters | | | |
| <input type="checkbox"/> D010 Selenium | <input type="checkbox"/> D011 Silver | | |
| <input type="checkbox"/> D012 Endrin | <input type="checkbox"/> D023 <i>o</i> -Cresol | <input type="checkbox"/> D033 Hexachlorobutadiene | |
| <input type="checkbox"/> D013 Lindane | <input type="checkbox"/> D024 <i>m</i> -Cresol | <input type="checkbox"/> D034 Hexachloroethane | |
| <input type="checkbox"/> D014 Methoxychlor | <input type="checkbox"/> D025 <i>p</i> -Cresol | <input type="checkbox"/> D035 Methyl ethyl ketone | |
| <input type="checkbox"/> D015 Toxaphene | <input type="checkbox"/> D026 Cresols (Total) | <input type="checkbox"/> D036 Nitrobenzene | |
| <input type="checkbox"/> D016 2,4-D | <input type="checkbox"/> D027 <i>p</i> -Dichlorobenzene | <input type="checkbox"/> D037 Pentachlorophenol | |
| <input type="checkbox"/> D017 2,4,5-TP (Silvex) | <input type="checkbox"/> D028 1,2-Dichloroethane | <input type="checkbox"/> D038 Pyridine | |
| <input type="checkbox"/> D018 Benzene | <input type="checkbox"/> D029 1,1-Dichloroethylene | <input type="checkbox"/> D039 Tetrachloroethylene | |
| <input type="checkbox"/> D019 Carbon tetrachloride | <input type="checkbox"/> D030 2,4-Dinitrotoluene | <input type="checkbox"/> D040 Trichloroethylene | |
| <input type="checkbox"/> D020 Chlordane | <input type="checkbox"/> D031 Heptachlor | <input type="checkbox"/> D041 2,4,5-Trichlorophenol | |
| <input type="checkbox"/> D021 Chlorobenzene | <input type="checkbox"/> D032 Hexachlorobenzene | <input type="checkbox"/> D042 2,4,6-Trichlorophenol | |
| <input type="checkbox"/> D022 Chloroform | | <input type="checkbox"/> D043 Vinyl chloride | |

Note: If any bolded entries are checked, form UC must be completed to address underlying hazardous constituents, unless the material is treated in a Clean Water Act (CWA) treatment process or unless otherwise noted above.

In addition, the following wastes are included in this shipment:

xx F001-F005 spent solvents. (If this box is checked, complete the F001-F005 section on the back of this form. Check the hazardous waste number(s) that applies, and identify the constituents likely to be present in the waste.)

If this shipment carries additional waste codes that are not addressed above, identify them here:

<u>EPA Waste Code</u>	<u>Subcategory (if applicable)</u>	<u>EPA Waste Code</u>	<u>Subcategory (if applicable)</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

F001-F005 Spent Solvents

Check the box(es) that applies; identify the individual constituents likely to be present.

<u>Hazardous waste description</u>	<u>Regulated hazardous constituents</u>	
<input type="checkbox"/> F001 Spent halogenated solvents used in degreasing	Carbon tetrachloride Tetrachloroethylene Trichloroethylene Trichloromonofluoromethane	Methylene chloride 1,1,1-Trichloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane
<input type="checkbox"/> F002 Spent halogenated solvents	Chlorobenzene Methylene chloride 1,1,1-Trichloroethane Trichloroethylene Trichloromonofluoromethane	<i>o</i> -Dichlorobenzene Tetrachloroethylene 1,1,2-Trichloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane
F003 Spent non-halogenated solvents	Acetone Cyclohexanone* Ethyl benzene Methanol* Xylenes (total)	<i>n</i> -Butyl alcohol Ethyl acetate Ethyl ether Methyl isobutyl ketone
<input type="checkbox"/> F004 Spent non-halogenated solvents	<i>m</i> -Cresol <i>p</i> -Cresol Nitrobenzene	<i>o</i> -Cresol Cresol-mixed isomers (cresylic acid)
F005 Spent non-halogenated solvents	Benzene 2-Ethoxyethanol Methyl ethyl ketone Pyridine	Carbon disulfide* Isobutyl alcohol 2-Nitropropane Toluene

*The treatment standards for carbon disulfide, cyclohexanone, and methanol nonwastewaters are based on the TCLP and apply to spent solvent nonwastewaters containing only one, two, or all three of these constituents. The treatment standards for these three constituents do not apply when any of the other F001-F005 constituents are present in the waste.

Hazardous Debris

- ☐ This shipment contains hazardous debris that will be treated to comply with the alternative treatment standards of 268.45 (e.g., macroencapsulation or at blasting).

(The definitions of "debris" and "hazardous debris" are in 40 CFR 268.2. Per 268.45, hazardous debris must be treated for each "contaminant subject to treatment." To determine these, look up the waste code in 268.40 and list the regulated hazardous constituents for each code.)

The contaminants subject to treatment for this debris are identified below:

<u>EPA Waste Code</u>	<u>Subcategory</u>	<u>Contaminants subject to treatment</u>	
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Rho Chem Corporation,
a wholly owned subsidiary of PHILIP SERVICES CORP.,
RCRA Land Disposal Restriction Notification Form UC

Generator: SPACE EXPLORATION TECH. U.S. EPA I.D. #: CAR000191536

Profile #: 390573-00

Manifest #: 000765059JJK

In accordance with 40 CFR 268.7(a), the underlying hazardous constituents must be addressed in this waste. Per 268.2(i), "underlying hazardous constituent" means any constituent listed in 268.48, Table UTS—Universal Treatment Standard which can reasonably be expected to be present at the point of generation of the hazardous waste, at a concentration above the constituent-specific UTS treatment standard. Refer to Form-EZ (attached) for the waste code(s), treatability group, and subcategory applicable to this waste.

In order to address underlying hazardous constituents in characteristic wastes, please check the appropriate box:

- ☐ I have reviewed the UTS list of 268.48, and per 268.7(a), I have determined that there are no underlying hazardous constituents reasonably expected to be present in this waste.
- ☒ I have reviewed the UTS list of 268.48, and per 268.7(a), I have determined that underlying hazardous constituents are present in this waste. The underlying hazardous constituents are identified as follows:

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

The determination of underlying hazardous constituents was based on:

- ☒ Generator's knowledge of the waste
- ☐ Analysis

I certify that I personally have examined and am familiar with the waste through analysis and testing, or through knowledge of the waste to support this certification. I certify that as an authorized representative of the generator named above, all the information submitted in this notification is true and correct to the best of my knowledge.

Tracey Rodriguez
Printed Name

De-12
Signature

11/21/08
Date

List of Underlying Hazardous Constituents 40 CFR 268.48

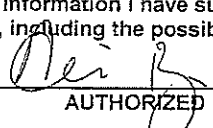
Circle or otherwise identify the underlying hazardous constituents present in the waste:

Organic Constituent	Organic Constituent	Organic Constituent	Organic Constituent
A2213	2-Chlorophenol	Ethyl acetate	Oxamyl
Acenaphthylene	3-Chloropropylene	Ethyl benzene	Parathion
Acenaphthene	Chrysene	Ethyl cyanide/Propanenitrile	Total PCBs(sum of all isomers, or all
Aroclors)			
Acetone	<i>o</i> -Cresol	Ethyl ether	Pebulate
Acetonitrile	<i>m</i> -Cresol	bis(2-Ethylhexyl)phthalate	Pentachlorobenzene
Acetophenone	<i>p</i> -Cresol	Ethyl methacrylate	PeCDDs(All Pentachlorodibenzo- <i>p</i> -dioxin
2-Acetylaminofluorene	<i>m</i> -Cumenyl methylcarbamate	Ethylene oxide	PeCDFs(All Pentachlorodibenzofurans)
Acrolein	Cyclohexanone	Famphur	Pentachloroethane
Acrylamide	<i>o,p'</i> -DDD	Fluoranthene	Pentachloronitrobenzene
Acrylonitrile	<i>p,p'</i> -DDD	Fluorene	Pentachlorophenol
Aldicarb sulfone	<i>o,p'</i> -DDE	Formetanate hydrochloride	Phenacetin
Aldrin	<i>p,p'</i> -DDE	Formparanate	Phenanthrene
4-Aminobiphenyl	<i>o,p'</i> -DDT	Heptachlor	Phenol
Aniline	<i>p,p'</i> -DDT	Heptachlor epoxide	<i>o</i> -Phenylenediamine
Anthracene	Dibenz(a,h)anthracene	Hexachlorobenzene	Phorate
Aramite	Dibenz(a,e)pyrene	Hexachlorobutadiene	Phthalic acid
alpha-BHC	1,2-Dibromo-3-chloropropane	Hexachlorocyclopentadiene	Phthalic anhydride
beta-BHC	1,2-Dibromoethane/Ethylene dibromide	HxCDDs(All Hexachlorodibenzo- <i>p</i> -dioxins)	Physostigmine
delta-BHC	Dibromomethane	HxCDFs(All Hexachlorodibenzofurans)	Physostigmine salicylate
gamma-BHC	<i>m</i> -Dichlorobenzene	Hexachloroethane	Promecarb
Barban	<i>o</i> -Dichlorobenzene	Hexachloropropylene	Pronamide
Bendiocarb	<i>p</i> -Dichlorobenzene	Indeno(1,2,3- <i>c,d</i>)pyrene	Propham
Bendiocarb phenol	Dichlorodifluoromethane	Iodomethane	Propoxur
Benomyl	1,1-Dichloroethane	Isobutyl alcohol	Prosulfocarb
Benzene	1,2-Dichloroethane	Isodrin	Pyrene
Benz(a)anthracene	1,1-Dichloroethylene	Isolan	Pyridine
Benzal chloride	<i>trans</i> -1,2-Dichloroethylene	Isosafrole	Safrole
Benzo(b)fluoranthene	2,4-Dichlorophenol	Kepone	Silvex/2,4,5-TP
Benzo(k)fluoranthene	2,6-Dichlorophenol	Methacrylonitrile	1,2,4,5-Tetrachlorobenzene
Benzo(g,h,i)perylene	2,4-Dichlorophenoxyacetic acid/2,4-D	Methanol	TCDDs(All Tetrachlorodibenzo- <i>p</i> -dioxins
Benzo(a)pyrene	1,2-Dichloropropane	Methapyrilene	TCDFs(All Tetrachlorodibenzofurans)
Bromodichloromethane	<i>cis</i> -1,3-Dichloropropylene	Methiocarb	1,1,1,2-Tetrachloroethane
Bromomethane/Methyl bromide	<i>trans</i> -1,3-Dichloropropylene	Methomyl	1,1,2,2-Tetrachloroethane
4-Bromophenyl phenyl ether	Dieldrin	Methoxychlor	Tetrachloroethylene
<i>n</i> -Butyl alcohol	Diethylene glycol, dicarbamate	3-Methylcholanthrene	2,3,4,6-Tetrachlorophenol
Butylate	Diethyl phthalate	4,4-Methylene-bis(2-chloroaniline)	Thiodicarb
Butyl benzyl phthalate	<i>p</i> -Dimethylaminoazobenzene	Methylene chloride	Thiophanate-methyl
2-sec-Butyl-4,6-dinitrophenol/Dinoseb	2,4-Dimethyl phenol	Methyl ethyl ketone	Tirpate
Carbaryl	Dimethyl phthalate	Methyl isobutyl ketone	Toluene
Carbenzadim	Dimetilan	Methyl methacrylate	Toxaphene
Carbofuran	Di- <i>n</i> -butyl phthalate	Methyl methansulfonate	Triallate
Carbofuran phenol	1,4-Dinitrobenzene	Methyl parathion	Tribromomethane/Bromoform
Carbon disulfide	4,6-Dinitro- <i>o</i> -cresol	Metolcarb	2,4,6-Tribromophenol
Carbon tetrachloride	2,4-Dinitrophenol	Mexacarbate	1,2,4-Trichlorobenzene
Carbosulfan	2,4-Dinitrotoluene	Molinate	1,1,1-Trichloroethane
Chlordane (alpha and gamma isomers)	2,6-Dinitrotoluene	Naphthalene	1,1,2-Trichloroethane
<i>p</i> -Chloroaniline	Di- <i>n</i> -octyl phthalate	2-Naphthylamine	Trichloroethylene
Chlorobenzene	Di- <i>n</i> -propylnitrosamine	<i>o</i> -Nitroaniline	Trichloromonoethoxyfluoromethane
Chlorobenzilate	1,4-Dioxane	<i>p</i> -Nitroaniline	2,4,5-Trichlorophenol
2-Chloro-1,3-butadiene	Diphenylamine	Nitrobenzene	2,4,6-Trichlorophenol
Chlorodibromomethane	Diphenylnitrosamine	5-Nitro- <i>o</i> -toluidine	2,4,5-Trichlorophenoxyacetic acid/2,4,5-'
Chloroethane	1,2-Diphenylhydrazine	<i>o</i> -Nitrophenol	1,2,3-Trichloropropane
bis(2-Chloroethoxy)methane	Disulfoton	<i>p</i> -Nitrophenol	1,1,2-Trichloro-1,2,2-trifluoroethane
bis(2-Chloroethyl)ether	Dithiocarbamates (total)	N-Nitrosodiethylamine	Triethylamine
Chloroform	Endosulfan I	N-Nitrosodimethylamine	tris-(2,3-Dibromopropyl)phosphate
bis(2-Chloroisopropyl)ether	Endosulfan II	N-Nitroso-di- <i>n</i> -butylamine	Vernolate
<i>p</i> -Chloro- <i>m</i> -cresol	Endosulfan sulfate	N-Nitrosomethylethylamine	Vinyl chloride
2-Chloroethyl vinyl ether	Endrin	N-Nitrosomorpholine	Xylenes-mixed isomers
Chloromethane/Methyl chloride concentrations)	Endrin aldehyde	N-Nitrosopiperidine	(sum of <i>o</i> -, <i>m</i> -, and <i>p</i> -xylene
2-Chloronaphthalene	EPTC	N-Nitrosopyrrolidine	
Inorganic Constituent	Inorganic Constituent	Inorganic Constituent	Inorganic Constituent
Antimony	Cadmium	Lead	Silver
Arsenic	Chromium (Total)	Mercury-Nonwastewater from Retort	Sulfides
Barium	Cyanides (Total)	Mercury-All Others	Thallium
Beryllium	Cyanides (Amenable)	Nickel	

Siemens Water Technologies Corp.

LAND DISPOSAL RESTRICTION NOTIFICATION FORM

Pursuant to CCR Title 22, Section 66268.7(40 CFR 268.7(a), I hereby notify that this waste shipment contains one or more of the following wastes restricted under the land disposal restrictions for which applicable treatment standards are set forth in CCR Title 22, Section 66268.40 (40 CFR 268.40)

Manifest Num. 000765058JJK Generator Name : Space Exploration EPA# CAR000191536																					
RCRA HAZARDOUS WASTE INFORMATION																					
U.S.F. PROFILE NUMBER/ MANIFEST LINE ITEM NUMBER	List all D, F, K, U & P Codes	Subcategory (IF ANY)	WASTEWATER*/ NONWASTEWATER WW NWW	California List ** Per CCR Title 22, Section 66268.32	Hazardous Debris Subject To CCR Title 22, Sec 66268.45																
1)P179098	D002,D007		<input checked="" type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>																
2)AP169390	D006, D007		<input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>																
3)350728-47			<input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>																
			<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>																
ADDITIONAL INFORMATION FOR D001, D002, D012-43, F001-5 & F039 WASTE STREAMS: (check one)																					
<input checked="" type="checkbox"/> There are no underlying hazardous constituents (UHCs) present <input type="checkbox"/> There are underlying hazardous constituents (UHCs) present which do not meet treatment standards per CCR Title 22, Section 66268.48 (Use the attached UTS Table and check the appropriate constituent(s) present in the waste stream)																					
DETERMINATION BASED UPON : (check one)																					
<input checked="" type="checkbox"/> Knowledge of the process generating the waste and the raw materials used and the reaction products <input type="checkbox"/> Results from analytical testing Analytical results attached <input type="checkbox"/> YES <input type="checkbox"/> NO																					
TERM DEFINITIONS:																					
* WASTEWATER = per CCR Title 22, Section 66260.10, WASTE THAT CONTAINS LESS THAN 1% BY WEIGHT TOTAL TOXIC ORGANICS (TOCs) AND 1% BY WEIGHT TOTAL SUSPENDED SOLIDS (TSS).																					
* CALIFORNIA LIST = THE FOLLOWING HAZARDOUS WASTES ARE PROHIBITED FROM LAND DISPOSAL: per CCR Title 22, Section 66268.32																					
<ul style="list-style-type: none"> Liquid hazardous waste with a pH less than or equal to 2.0 Liquid hazardous waste containing PCB's at concentration of greater than or equal to 50 ppm Liquid hazardous waste, including free liquids associated with any solids/sludge, containing free cyanide at concentrations greater than or equal to 1,000 mg/L Liquid hazardous waste, including free liquids associated with any solids/sludge, containing metals at concentrations greater than or equal to the following: <table border="1" style="width:100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td style="width:33%;">ARSENIC</td> <td style="width:33%;">500 mg/L</td> <td style="width:33%;">MERCURY</td> <td style="width:33%;">20 mg/L</td> </tr> <tr> <td>CADMIUM</td> <td>100 mg/L</td> <td>NICKEL</td> <td>134 mg/L</td> </tr> <tr> <td>CHROMIUM</td> <td>500 mg/L</td> <td>SELENIUM</td> <td>100 mg/L</td> </tr> <tr> <td>LEAD</td> <td>500 mg/L</td> <td>THALLIUM</td> <td>130 mg/L</td> </tr> </table> Liquid hazardous waste, that contains HOC's in total concentration greater than or equal to 1,000 mg/L Non-liquid RCRA hazardous waste containing HOC's in total concentration greater than or equal to 1,000 mg/L 						ARSENIC	500 mg/L	MERCURY	20 mg/L	CADMIUM	100 mg/L	NICKEL	134 mg/L	CHROMIUM	500 mg/L	SELENIUM	100 mg/L	LEAD	500 mg/L	THALLIUM	130 mg/L
ARSENIC	500 mg/L	MERCURY	20 mg/L																		
CADMIUM	100 mg/L	NICKEL	134 mg/L																		
CHROMIUM	500 mg/L	SELENIUM	100 mg/L																		
LEAD	500 mg/L	THALLIUM	130 mg/L																		
CERTIFICATION																					
I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification. I believe that the information I have submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment																					
SOS for Space Exploration			 _____ AUTHORIZED SIGNATURE		11/21/08 _____ DATE																
COMPANY NAME																					



Rho Chem Corporation,
a wholly owned subsidiary of PHILIP SERVICES CORP.,
RCRA Land Disposal Restriction Notification Form EZ

Generator: SPACE EXPLORATION TECH. U.S. EPA I.D. #: CAR000191536

Profile # 392451-00, 390935-00

Manifest #: 000765013JJK

The wastes identified on this form are subject to the land disposal restrictions of 40 CFR Part 268. The wastes do not meet the treatment standards specified in 268.32, Subpart D or do not meet the applicable prohibition levels specified in 268.32. Pursuant to 40 CFR 268.7(a), the required information applicable to each waste is identified below (check all boxes that apply):

Treatability Group: ☐ Wastewater ☒ Nonwastewater
(Wastewaters contain less than 1% filterable solids and less than 1% Total Organic Carbon)

D001 Ignitable (except for High TOC) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems
(Complete form UC, unless D001 is the only "D" code and the waste is to be combusted or recovered.)

☒ D001 Ignitable (except for High TOC) managed in CWA/ CWA-equivalent/Class I SDWA systems

☐ D001 High TOC Ignitable (greater than 10% total organic carbon)

D002 Corrosive managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems (Complete form UC)

☐ D002 Corrosive managed in CWA/ CWA-equivalent/Class I SDWA systems

☐ D003 Reactive Sulfides based on 261.23(a)(5)

☐ D003 Reactive Cyanides based on 261.23(a)(5)

D003 Water Reactives based on 261.23(a)(2),(3) and (4) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems (Complete form UC)

☐ D003 Water Reactives based on 261.23(a)(2),(3) and (4) managed in CWA/ CWA-equivalent/Class I SDWA systems

☐ D003 Other Reactives based on 261.23(a)(1) (Complete form UC)

If D004-43 boxes are checked, complete and attach Form UC to address underlying hazardous constituents (unless these wastes are to be managed in CWA/CWA-equivalent/Class I SDWA systems):

☐ D004 Arsenic ☐ D005 Barium ☐ D006 Cadmium ☐ D006 Cadmium-containing batteries

D007 Chromium D008 Lead ☐ D008 Lead acid batteries

☐ D009 High mercury inorganic (>260 mg/kg total), including incinerator residue and residues from RMERC

☐ D009 High-mercury organic (>260 mg/kg total), not including incinerator residue

☐ D009 Low-mercury (<260 mg/kg total) ☐ D009 All D009 wastewaters

☐ D010 Selenium ☐ D011 Silver

☐ D012 Endrin ☐ D023 *o*-Cresol ☐ D033 Hexachlorobutadiene

☐ D013 Lindane ☐ D024 *m*-Cresol ☐ D034 Hexachloroethane

☐ D014 Methoxychlor ☐ D025 *p*-Cresol ☐ D035 Methyl ethyl ketone

☐ D015 Toxaphene ☐ D026 Cresols (Total) ☐ D036 Nitrobenzene

☐ D016 2,4-D ☐ D027 *p*-Dichlorobenzene ☐ D037 Pentachlorophenol

☐ D017 2,4,5-TP (Silvex) ☐ D028 1,2-Dichloroethane ☐ D038 Pyridine

☐ D018 Benzene ☐ D029 1,1-Dichloroethylene ☐ D039 Tetrachloroethylene

☐ D019 Carbon tetrachloride ☐ D030 2,4-Dinitrotoluene ☐ D040 Trichloroethylene

☐ D020 Chlordane ☐ D031 Heptachlor ☐ D041 2,4,5-Trichlorophenol

☐ D021 Chlorobenzene ☐ D032 Hexachlorobenzene ☐ D042 2,4,6-Trichlorophenol

☐ D022 Chloroform ☐ D043 Vinyl chloride

Note: If any bolded entries are checked, form UC must be completed to address underlying hazardous constituents, unless the material is treated in a Clean Water Act (CWA) treatment process or unless otherwise noted above.

In addition, the following wastes are included in this shipment:

xx F001-F005 spent solvents. (If this box is checked, complete the F001-F005 section on the back of this form. Check the hazardous waste number(s) that applies, and identify the constituents likely to be present in the waste.)

If this shipment carries additional waste codes that are not addressed above, identify them here:

<u>EPA Waste Code</u>	<u>Subcategory (if applicable)</u>	<u>EPA Waste Code</u>	<u>Subcategory (if applicable)</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

F001-F005 Spent Solvents

Check the box(es) that applies; identify the individual constituents likely to be present.

Hazardous waste descriptionRegulated hazardous constituents

<input type="checkbox"/> F001 Spent halogenated solvents used in degreasing	Carbon tetrachloride Tetrachloroethylene Trichloroethylene Trichloromonofluoromethane	Methylene chloride 1,1,1-Trichloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane
<input type="checkbox"/> F002 Spent halogenated solvents	Chlorobenzene Methylene chloride 1,1,1-Trichloroethane Trichloroethylene Trichloromonofluoromethane	<i>o</i> -Dichlorobenzene Tetrachloroethylene 1,1,2-Trichloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane
F003 Spent non-halogenated solvents	Acetone Cyclohexanone* Ethyl benzene Methanol* Xylenes (total)	<i>n</i> -Butyl alcohol Ethyl acetate Ethyl ether Methyl isobutyl ketone
<input type="checkbox"/> F004 Spent non-halogenated solvents	<i>m</i> -Cresol <i>p</i> -Cresol Nitrobenzene	<i>o</i> -Cresol Cresol-mixed isomers (cresylic acid)
F005 Spent non-halogenated solvents	Benzene 2-Ethoxyethanol Methyl ethyl ketone Pyridine	Carbon disulfide* Isobutyl alcohol 2-Nitropropane Toluene

*The treatment standards for carbon disulfide, cyclohexanone, and methanol nonwastewaters are based on the TCLP and apply to spent solvent nonwastew containing only one, two, or all three of these constituents. The treatment standards for these three constituents do not apply when any of the other F001-F constituents are present in the waste.

Hazardous Debris

- ☐ This shipment contains hazardous debris that will be treated to comply with the alternative treatment standards of 268.45 (e.g., macroencapsulation or al blasting).

(The definitions of "debris" and "hazardous debris" are in 40 CFR 268.2. Per 268.45, hazardous debris must be treated for each "contam subject to treatment." To determine these, look up the waste code in 268.40 and list the regulated hazardous constituents for each code.)

The contaminants subject to treatment for this debris are identified below:

<u>EPA Waste Code</u>	<u>Subcategory</u>	<u>Contaminants subject to treatment</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

**Rho Chem Corporation,
a wholly owned subsidiary of PHILIP SERVICES CORP.,
RCRA Land Disposal Restriction Notification Form UC**

Generator: SPACE EXPLORATION TECH. U.S. EPA I.D. #: CAR000191536

Profile #: 392451-00, 390935-00

Manifest #: 000765013JJK

In accordance with 40 CFR 268.7(a), the underlying hazardous constituents must be addressed in this waste. Per 268.2(i), "underlying hazardous constituent" means any constituent listed in 268.48, Table UTS—Universal Treatment Standard which can reasonably be expected to be present at the point of generation of the hazardous waste, at a concentration above the constituent-specific UTS treatment standard. Refer to Form-EZ (attached) for the waste code(s), treatability group, and subcategory applicable to this waste.

In order to address underlying hazardous constituents in characteristic wastes, please check the appropriate box:


- ☐ I have reviewed the UTS list of 268.48, and per 268.7(a), I have determined that there are no underlying hazardous constituents reasonably expected to be present in this waste.
- ☒ I have reviewed the UTS list of 268.48, and per 268.7(a), I have determined that underlying hazardous constituents are present in this waste. The underlying hazardous constituents are identified as follows:

The determination of underlying hazardous constituents was based on:

- ☒ Generator's knowledge of the waste
- ☐ Analysis

I certify that I personally have examined and am familiar with the waste through analysis and testing, or through knowledge of the waste to support this certification. I certify that as an authorized representative of the generator named above, all the information submitted in this notification is true and correct to the best of my knowledge.

Traceli Rodriguez
Printed Name


Signature

10/20/08
Date

List of Underlying Hazardous Constituents 40 CFR 268.48

Circle or otherwise identify the underlying hazardous constituents present in the waste:

Organic Constituent	Organic Constituent	Organic Constituent	Organic Constituent
A2213	2-Chlorophenol	Ethyl acetate	Oxamyl
Acenaphthylene	3-Chloropropylene	Ethyl benzene	Parathion
Acenaphthene	Chrysene	Ethyl cyanide/Propanenitrile	Total PCBs(sum of all isomers, or all
Aroclors)			
Acetone	<i>o</i> -Cresol	Ethyl ether	Pebulate
Acetonitrile	<i>m</i> -Cresol	bis(2-Ethylhexyl)phthalate	Pentachlorobenzene
Acetophenone	<i>p</i> -Cresol	Ethyl methacrylate	PeCDDs(All Pentachlorodibenzo- <i>p</i> -dioxi
2-Acetylaminofluorene	<i>m</i> -Cumenyl methylcarbamate	Ethylene oxide	PeCDFs(All Pentachlorodibenzofurans)
Acrolein	Cyclohexanone	Famphur	Pentachloroethane
Acrylamide	<i>o,p'</i> -DDD	Fluoranthene	Pentachloronitrobenzene
Acrylonitrile	<i>p,p'</i> -DDD	Fluorene	Pentachlorophenol
Aldicarb sulfone	<i>o,p'</i> -DDE	Formetanate hydrochloride	Phenacetin
Aldrin	<i>p,p'</i> -DDE	Formparanate	Phenanthrene
4-Aminobiphenyl	<i>o,p'</i> -DDT	Heptachlor	Phenol
Aniline	<i>p,p'</i> -DDT	Heptachlor epoxide	<i>o</i> -Phenylenediamine
Anthracene	Dibenz(a,h)anthracene	Hexachlorobenzene	Phorate
Aramite	Dibenz(a,e)pyrene	Hexachlorobutadiene	Phthalic acid
alpha-BHC	1,2-Dibromo-3-chloropropane	Hexachlorocyclopentadiene	Phthalic anhydride
beta-BHC	1,2-Dibromoethane/Ethylene dibromide	HxCDDs(All Hexachlorodibenzo- <i>p</i> -dioxins)	Physostigmine
delta-BHC	Dibromomethane	HxCDFs(All Hexachlorodibenzofurans)	Physostigmine salicylate
gamma-BHC	<i>m</i> -Dichlorobenzene	Hexachloroethane	Promecarb
Barban	<i>o</i> -Dichlorobenzene	Hexachloropropylene	Pronamide
Bendiocarb	<i>p</i> -Dichlorobenzene	Indeno(1,2,3- <i>c,d</i>)pyrene	Propham
Bendiocarb phenol	Dichlorodifluoromethane	Iodomethane	Propoxur
Benomyl	1,1-Dichloroethane	Isobutyl alcohol	Prosulfocarb
Benzene	1,2-Dichloroethane	Isodrin	Pyrene
Benz(a)anthracene	1,1-Dichloroethylene	Isolan	Pyridine
Benzal chloride	<i>trans</i> -1,2-Dichloroethylene	Isosafrole	Safrole
Benzo(b)fluoranthene	2,4-Dichlorophenol	Kepone	Silvex/2,4,5-TP
Benzo(k)fluoranthene	2,6-Dichlorophenol	Methacrylonitrile	1,2,4,5-Tetrachlorobenzene
Benzo(g,h,i)perylene	2,4-Dichlorophenoxyacetic acid/2,4-D	Methanol	TCDDs(All Tetrachlorodibenzo- <i>p</i> -dioxins)
Benzo(a)pyrene	1,2-Dichloropropane	Methapyrilene	TCDFs(All Tetrachlorodibenzofurans)
Bromodichloromethane	<i>cis</i> -1,3-Dichloropropylene	Methiocarb	1,1,1,2-Tetrachloroethane
Bromomethane/Methyl bromide	<i>trans</i> -1,3-Dichloropropylene	Methomyl	1,1,2,2-Tetrachloroethane
4-Bromophenyl phenyl ether	Dieldrin	Methoxychlor	Tetrachloroethylene
<i>n</i> -Butyl alcohol	Diethylene glycol, dicarbamate	3-Methylcholanthrene	2,3,4,6-Tetrachlorophenol
Butylate	Diethyl phthalate	4,4-Methylene-bis(2-chloroaniline)	Thiodicarb
Butyl benzyl phthalate	<i>p</i> -Dimethylaminoazobenzene	Methylene chloride	Thiophanate-methyl
2-sec-Butyl-4,6-dinitrophenol/Dinoseb	2,4-Dimethyl phenol	Methyl ethyl ketone	Tirpate
Carbaryl	Dimethyl phthalate	Methyl isobutyl ketone	Toluene
Carbenzadim	Dimetilan	Methyl methacrylate	Toxaphene
Carbofuran	Di- <i>n</i> -butyl phthalate	Methyl methansulfonate	Triallate
Carbofuran phenol	1,4-Dinitrobenzene	Methyl parathion	Tribromomethane/Bromoform
Carbon disulfide	4,6-Dinitro- <i>o</i> -cresol	Metolcarb	2,4,6-Tribromophenol
Carbon tetrachloride	2,4-Dinitrophenol	Mexacarbate	1,2,4-Trichlorobenzene
Carbosulfan	2,4-Dinitrotoluene	Mollinate	1,1,1-Trichloroethane
Chlordane (alpha and gamma isomers)	2,6-Dinitrotoluene	Naphthalene	1,1,2-Trichloroethane
<i>p</i> -Chloroaniline	Di- <i>n</i> -octyl phthalate	2-Naphthylamine	Trichloroethylene
Chlorobenzene	Di- <i>n</i> -propyl nitrosamine	<i>o</i> -Nitroaniline	Trichloromonofluoromethane
Chlorobenzilate	1,4-Dioxane	<i>p</i> -Nitroaniline	2,4,5-Trichlorophenol
2-Chloro-1,3-butadiene	Diphenylamine	Nitrobenzene	2,4,6-Trichlorophenol
Chlorodibromomethane	Diphenylnitrosamine	5-Nitro- <i>o</i> -toluidine	2,4,5-Trichlorophenoxyacetic acid/2,4,5-T
Chloroethane	1,2-Diphenylhydrazine	<i>o</i> -Nitrophenol	1,2,3-Trichloropropane
bis(2-Chloroethoxy)methane	Disulfoton	<i>p</i> -Nitrophenol	1,1,2-Trichloro-1,2,2-trifluoroethane
bis(2-Chloroethyl)ether	Dithiocarbamates (total)	N-Nitrosodiethylamine	Triethylamine
Chloroform	Endosulfan I	N-Nitrosodimethylamine	tris-(2,3-Dibromopropyl)phosphate
bis(2-Chloroisopropyl)ether	Endosulfan II	N-Nitroso-di- <i>n</i> -butylamine	Vernolate
<i>p</i> -Chloro- <i>m</i> -cresol	Endosulfan sulfate	N-Nitrosomethylethylamine	Vinyl chloride
2-Chloroethyl vinyl ether	Endrin	N-Nitrosomorpholine	Xylenes-mixed isomers
Chloromethane/Methyl chloride concentrations)	Endrin aldehyde	N-Nitrosopiperidine	(sum of <i>o</i> -, <i>m</i> -, and <i>p</i> -xylene
2-Chloronaphthalene	EPTC	N-Nitrosopyrrolidine	
<u>Inorganic Constituent</u>	<u>Inorganic Constituent</u>	<u>Inorganic Constituent</u>	<u>Inorganic Constituent</u>
Antimony	Cadmium	Lead	Silver
Arsenic	Chromium (Total)	Mercury-Nonwastewater from Retort	Sulfides
Barium	Cyanides (Total)	Mercury-All Others	Thallium
Beryllium	Cyanides (Amenable)	Nickel	



Rho Chem Corporation,
a wholly owned subsidiary of PHILIP SERVICES CORP.,
RCRA Land Disposal Restriction Notification Form EZ

Generator: SPACE EXPLORATION TECH. U.S. EPA I.D. #: CAR000191536

Profile #390573-00,392451-00, 394091-00, 392735-00 Manifest #: 000765008JJK

The wastes identified on this form are subject to the land disposal restrictions of 40 CFR Part 268. The wastes do not meet the treatment standards specified in 268.32, Subpart D or do not meet the applicable prohibition levels specified in 268.32. Pursuant to 40 CFR 268.7(a), the required information applicable to each waste is identified below (check all boxes that apply):

Treatability Group: ☐ Wastewater ☒ Nonwastewater
(Wastewaters contain less than 1% filterable solids and less than 1% Total Organic Carbon)

D001 Ignitable (except for High TOC) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems
(Complete form UC, unless D001 is the only "D" code and the waste is to be combusted or recovered.)

☒ D001 Ignitable (except for High TOC) managed in CWA/ CWA-equivalent/Class I SDWA systems

☐ D001 High TOC Ignitable (greater than 10% total organic carbon)

D002 Corrosive managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems (Complete form UC)

☐ D002 Corrosive managed in CWA/ CWA-equivalent/Class I SDWA systems

☐ D003 Reactive Sulfides based on 261.23(a)(5)

☐ D003 Reactive Cyanides based on 261.23(a)(5)

D003 Water Reactives based on 261.23(a)(2),(3) and (4) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems (Complete form UC)

☐ D003 Water Reactives based on 261.23(a)(2),(3) and (4) managed in CWA/ CWA-equivalent/Class I SDWA systems

☐ D003 Other Reactives based on 261.23(a)(1) (Complete form UC)

If D004-43 boxes are checked, complete and attach Form UC to address underlying hazardous constituents (unless these wastes are to be managed in CWA/CWA-equivalent/Class I SDWA systems):

- | | | | |
|--|--|---|--|
| <input type="checkbox"/> D004 Arsenic | <input type="checkbox"/> D005 Barium | <input type="checkbox"/> D006 Cadmium | <input type="checkbox"/> D006 Cadmium-containing batteries |
| <input type="checkbox"/> D007 Chromium | <input type="checkbox"/> D008 Lead | <input type="checkbox"/> D008 Lead acid batteries | |
| <input type="checkbox"/> D009 High mercury inorganic (>260 mg/kg total), including incinerator residue and residues from RMERC | | | |
| <input type="checkbox"/> D009 High-mercury organic (>260 mg/kg total), not including incinerator residue | | | |
| <input type="checkbox"/> D009 Low-mercury (<260 mg/kg total) | | <input type="checkbox"/> D009 All D009 wastewaters | |
| <input type="checkbox"/> D010 Selenium | <input type="checkbox"/> D011 Silver | | |
| <input type="checkbox"/> D012 Endrin | <input type="checkbox"/> D023 o-Cresol | <input type="checkbox"/> D033 Hexachlorobutadiene | |
| <input type="checkbox"/> D013 Lindane | <input type="checkbox"/> D024 m-Cresol | <input type="checkbox"/> D034 Hexachloroethane | |
| <input type="checkbox"/> D014 Methoxychlor | <input type="checkbox"/> D025 p-Cresol | <input type="checkbox"/> D035 Methyl ethyl ketone | |
| <input type="checkbox"/> D015 Toxaphene | <input type="checkbox"/> D026 Cresols (Total) | <input type="checkbox"/> D036 Nitrobenzene | |
| <input type="checkbox"/> D016 2,4-D | <input type="checkbox"/> D027 p-Dichlorobenzene | <input type="checkbox"/> D037 Pentachlorophenol | |
| <input type="checkbox"/> D017 2,4,5-TP (Silvex) | <input type="checkbox"/> D028 1,2-Dichloroethane | <input type="checkbox"/> D038 Pyridine | |
| <input type="checkbox"/> D018 Benzene | <input type="checkbox"/> D029 1,1-Dichloroethylene | <input type="checkbox"/> D039 Tetrachloroethylene | |
| <input type="checkbox"/> D019 Carbon tetrachloride | <input type="checkbox"/> D030 2,4-Dinitrotoluene | <input type="checkbox"/> D040 Trichloroethylene | |
| <input type="checkbox"/> D020 Chlordane | <input type="checkbox"/> D031 Heptachlor | <input type="checkbox"/> D041 2,4,5-Trichlorophenol | |
| <input type="checkbox"/> D021 Chlorobenzene | <input type="checkbox"/> D032 Hexachlorobenzene | <input type="checkbox"/> D042 2,4,6-Trichlorophenol | |
| <input type="checkbox"/> D022 Chloroform | | <input type="checkbox"/> D043 Vinyl chloride | |

Note: If any bolded entries are checked, form UC must be completed to address underlying hazardous constituents, unless the material is treated in a Clean Water Act (CWA) treatment process or unless otherwise noted above.

In addition, the following wastes are included in this shipment:

xx F001-F005 spent solvents. (If this box is checked, complete the F001-F005 section on the back of this form. Check the hazardous waste number(s) that applies, and identify the constituents likely to be present in the waste.)

If this shipment carries additional waste codes that are not addressed above, identify them here:

<u>EPA Waste Code</u>	<u>Subcategory (if applicable)</u>	<u>EPA Waste Code</u>	<u>Subcategory (if applicable)</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

F001-F005 Spent Solvents

Check the box(es) that applies; identify the individual constituents likely to be present.

<u>Hazardous waste description</u>	<u>Regulated hazardous constituents</u>	
<input type="checkbox"/> F001 Spent halogenated solvents used in degreasing	Carbon tetrachloride Tetrachloroethylene Trichloroethylene Trichloromonofluoromethane	Methylene chloride 1,1,1-Trichloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane
<input type="checkbox"/> F002 Spent halogenated solvents	Chlorobenzene Methylene chloride 1,1,1-Trichloroethane Trichloroethylene Trichloromonofluoromethane	<i>o</i> -Dichlorobenzene Tetrachloroethylene 1,1,2-Trichloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane
X F003 Spent non-halogenated solvents	Acetone Cyclohexanone* Ethyl benzene Methanol* Xylenes (total)	<i>n</i> -Butyl alcohol Ethyl acetate Ethyl ether Methyl isobutyl ketone
<input type="checkbox"/> F004 Spent non-halogenated solvents	<i>m</i> -Cresol <i>p</i> -Cresol Nitrobenzene	<i>o</i> -Cresol Cresol-mixed isomers (cresylic acid)
X F005 Spent non-halogenated solvents	Benzene 2-Ethoxyethanol Methyl ethyl ketone Pyridine	Carbon disulfide* Isobutyl alcohol 2-Nitropropane Toluene

*The treatment standards for carbon disulfide, cyclohexanone, and methanol nonwastewaters are based on the TCLP and apply to spent solvent nonwastewaters containing only one, two, or all three of these constituents. The treatment standards for these three constituents do not apply when any of the other F001-F005 constituents are present in the waste.

Hazardous Debris

- ☐ This shipment contains hazardous debris that will be treated to comply with the alternative treatment standards of 268.45 (e.g., macroencapsulation or at blasting).

(The definitions of "debris" and "hazardous debris" are in 40 CFR 268.2. Per 268.45, hazardous debris must be treated for each "contaminant subject to treatment." To determine these, look up the waste code in 268.40 and list the regulated hazardous constituents for each code.)

The contaminants subject to treatment for this debris are identified below:

<u>EPA Waste Code</u>	<u>Subcategory</u>	<u>Contaminants subject to treatment</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

***Rho Chem Corporation,
a wholly owned subsidiary of PHILIP SERVICES CORP.,
RCRA Land Disposal Restriction Notification Form UC***

Generator: SPACE EXPLORATION TECH. U.S. EPA I.D. #: CAR000191536

Profile #: 390573-00,392451-00,394091-00,392735-00 Manifest #: 000765008JJK

In accordance with 40 CFR 268.7(a), the underlying hazardous constituents must be addressed in this waste. Per 268.2(i), "underlying hazardous constituent" means any constituent listed in 268.48, Table UTS—Universal Treatment Standard which can reasonably be expected to be present at the point of generation of the hazardous waste, at a concentration above the constituent-specific UTS treatment standard. Refer to Form-EZ (attached) for the waste code(s), treatability group, and subcategory applicable to this waste.

In order to address underlying hazardous constituents in characteristic wastes, please check the appropriate box:

- ☐ I have reviewed the UTS list of 268.48, and per 268.7(a), I have determined that there are no underlying hazardous constituents reasonably expected to be present in this waste.
- ☒ I have reviewed the UTS list of 268.48, and per 268.7(a), I have determined that underlying hazardous constituents are present in this waste. The underlying hazardous constituents are identified as follows:

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

The determination of underlying hazardous constituents was based on:

- ☒ Generator's knowledge of the waste
- ☐ Analysis

I certify that I personally have examined and am familiar with the waste through analysis and testing, or through knowledge of the waste to support this certification. I certify that as an authorized representative of the generator named above, all the information submitted in this notification is true and correct to the best of my knowledge.

Araaceli Rodriguez
Printed Name

De. R.
Signature

10-17-08
Date

List of Underlying Hazardous Constituents 40 CFR 268.48

Circle or otherwise identify the underlying hazardous constituents present in the waste:

Organic Constituent	Organic Constituent	Organic Constituent	Organic Constituent
A2213	2-Chlorophenol	Ethyl acetate	Oxamyl
Acenaphthylene	3-Chloropropylene	Ethyl benzene	Parathion
Acenaphthene	Chrysene	Ethyl cyanide/Propanenitrile	Total PCBs(sum of all isomers, or all
Aroclors)			
Acetone	<i>o</i> -Cresol	Ethyl ether	Pebulate
Acetonitrile	<i>m</i> -Cresol	bis(2-Ethylhexyl)phthalate	Pentachlorobenzene
Acetophenone	<i>p</i> -Cresol	Ethyl methacrylate	PeCDDs(All Pentachlorodibenzo- <i>p</i> -dioxi
2-Acetylaminofluorene	<i>m</i> -Cumenyl methylcarbamate	Ethylene oxide	PeCDFs(All Pentachlorodibenzofurans)
Acrolein	Cyclohexanone	Famphur	Pentachloroethane
Acrylamide	<i>o,p'</i> -DDD	Fluoranthene	Pentachloronitrobenzene
Acrylonitrile	<i>p,p'</i> -DDD	Fluorene	Pentachlorophenol
Aldicarb sulfone	<i>o,p'</i> -DDE	Formetanate hydrochloride	Phenacetin
Aldrin	<i>p,p'</i> -DDE	Formparanate	Phenanthrene
4-Aminobiphenyl	<i>o,p'</i> -DDT	Heptachlor	Phenol
Aniline	<i>p,p'</i> -DDT	Heptachlor epoxide	<i>o</i> -Phenylenediamine
Anthracene	Dibenz(a,h)anthracene	Hexachlorobenzene	Phorate
Aramite	Dibenz(a,e)pyrene	Hexachlorobutadiene	Phthalic acid
alpha-BHC	1,2-Dibromo-3-chloropropane	Hexachlorocyclopentadiene	Phthalic anhydride
beta-BHC	1,2-Dibromoethane/Ethylene dibromide	HxCDDs(All Hexachlorodibenzo- <i>p</i> -dioxins)	Physostigmine
delta-BHC	Dibromomethane	HxCDFs(All Hexachlorodibenzofurans)	Physostigmine salicylate
gamma-BHC	<i>m</i> -Dichlorobenzene	Hexachloroethane	Promecarb
Barban	<i>o</i> -Dichlorobenzene	Hexachloropropylene	Pronamide
Bendiocarb	<i>p</i> -Dichlorobenzene	Indeno(1,2,3- <i>c,d</i>)pyrene	Propham
Bendiocarb phenol	Dichlorodifluoromethane	Iodomethane	Propoxur
Benomyl	1,1-Dichloroethane	Isobutyl alcohol	Prosulfocarb
Benzene	1,2-Dichloroethane	Isodrin	Pyrene
Benz(a)anthracene	1,1-Dichloroethylene	Isolan	Pyridine
Benzal chloride	<i>trans</i> -1,2-Dichloroethylene	Isosafrole	Safrole
Benzo(b)fluoranthene	2,4-Dichlorophenol	Kepone	Silvex/2,4,5-TP
Benzo(k)fluoranthene	2,6-Dichlorophenol	Methacrylonitrile	1,2,4,5-Tetrachlorobenzene
Benzo(g,h,i)perylene	2,4-Dichlorophenoxyacetic acid/2,4-D	Methanol	TCDDs(All Tetrachlorodibenzo- <i>p</i> -dioxins)
Benzo(a)pyrene	1,2-Dichloropropane	Methapyrilene	TCDFs(All Tetrachlorodibenzofurans)
Bromodichloromethane	<i>cis</i> -1,3-Dichloropropylene	Methiocarb	1,1,1,2-Tetrachloroethane
Bromomethane/Methyl bromide	<i>trans</i> -1,3-Dichloropropylene	Methomyl	1,1,2,2-Tetrachloroethane
4-Bromophenyl phenyl ether	Dieldrin	Methoxychlor	Tetrachloroethylene
<i>n</i> -Butyl alcohol	Diethylene glycol, dicarbamate	3-Methylcholanthrene	2,3,4,6-Tetrachlorophenol
Butylate	Diethyl phthalate	4,4-Methylene-bis(2-chloroaniline)	Thiodicarb
Butyl benzyl phthalate	<i>p</i> -Dimethylaminoazobenzene	Methylene chloride	Thiophanate-methyl
2-sec-Butyl-4,6-dinitrophenol/Dinoseb	2,4-Dimethyl phenol	Methyl ethyl ketone	Tirpate
Carbaryl	Dimethyl phthalate	Methyl isobutyl ketone	Toluene
Carbenzadim	Dimetilan	Methyl methacrylate	Toxaphene
Carbofuran	Di- <i>n</i> -butyl phthalate	Methyl methansulfonate	Triallate
Carbofuran phenol	1,4-Dinitrobenzene	Methyl parathion	Tribromomethane/Bromoform
Carbon disulfide	4,6-Dinitro- <i>o</i> -cresol	Metolcarb	2,4,6-Tribromophenol
Carbon tetrachloride	2,4-Dinitrophenol	Mexacarbate	1,2,4-Trichlorobenzene
Carbosulfan	2,4-Dinitrotoluene	Molinate	1,1,1-Trichloroethane
Chlordane (alpha and gamma isomers)	2,6-Dinitrotoluene	Naphthalene	1,1,2-Trichloroethane
<i>p</i> -Chloroaniline	Di- <i>n</i> -octyl phthalate	2-Naphthylamine	Trichloroethylene
Chlorobenzene	Di- <i>n</i> -propyl nitrosamine	<i>o</i> -Nitroaniline	Trichloromonofluoromethane
Chlorobenzilate	1,4-Dioxane	<i>p</i> -Nitroaniline	2,4,5-Trichlorophenol
2-Chloro-1,3-butadiene	Diphenylamine	Nitrobenzene	2,4,6-Trichlorophenol
Chlorodibromomethane	Diphenyl nitrosamine	5-Nitro- <i>o</i> -toluidine	2,4,5-Trichlorophenoxyacetic acid/2,4,5-T
Chloroethane	1,2-Diphenylhydrazine	<i>o</i> -Nitrophenol	1,2,3-Trichloropropane
bis(2-Chloroethoxy)methane	Disulfoton	<i>p</i> -Nitrophenol	1,1,2-Trichloro-1,2,2-trifluoroethane
bis(2-Chloroethyl)ether	Dithiocarbamates (total)	N-Nitrosodiethylamine	Triethylamine
Chloroform	Endosulfan I	N-Nitrosodimethylamine	tris-(2,3-Dibromopropyl)phosphate
bis(2-Chloroisopropyl)ether	Endosulfan II	N-Nitroso-di- <i>n</i> -butylamine	Vernolate
<i>p</i> -Chloro- <i>m</i> -cresol	Endosulfan sulfate	N-Nitrosomethylethylamine	Vinyl chloride
2-Chloroethyl vinyl ether	Endrin	N-Nitrosomorpholine	Xylenes-mixed isomers
Chloromethane/Methyl chloride concentrations)	Endrin aldehyde	N-Nitrosopiperidine	(sum of <i>o</i> -, <i>m</i> -, and <i>p</i> -xylene
2-Chloronaphthalene	EPTC	N-Nitrosopyrrolidine	
<u>Inorganic Constituent</u>	<u>Inorganic Constituent</u>	<u>Inorganic Constituent</u>	<u>Inorganic Constituent</u>
Antimony	Cadmium	Lead	Silver
Arsenic	Chromium (Total)	Mercury-Nonwastewater from Retort	Sulfides
Barium	Cyanides (Total)	Mercury-All Others	Thallium
Beryllium	Cyanides (Amenable)	Nickel	



EPA I.D. # 043000191536

MANIFEST #: 00049-7923 JJK

Hawthorne, CA 90250

~~SEE INSTRUCTIONS (1,2,3 and 4)~~

Pursuant to CCR Title 22, Section 66268.7 (40 CFR 268.7), I hereby notify that this waste shipment contains one or more of the following wastes restricted under the land disposal restriction for which applicable treatment standards are set forth in CCR Title 22, Chapter 18, Land Disposal Restrictions.

[illegible]

IF NECESSARY USE A CONTINUATION PAGE.

Page 1 of .

CERTIFICATION

I certify under penalty of law that I personally have examined and am familiar with the waste thorough analysis and testing, or through knowledge of the process generating the waste, to support this certification. I believe that the information that I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

Space Exploration
GENERATOR/ COMPANY NAME

8-20-08
DATE

Dr. B. - on Behalf of SPACE EX
AUTHORIZED SIGNATURE

Araceli Rodriguez
PRINTED NAME/TITLE

if WASTE WATER (WW) Check to left		CUSTOMER: <i>Space Exploration</i>						WASTE APPROVAL # <i>304635</i>			
if WASTE WATER (WW) Check to left		WASTE NAME: <i>Flammable Liquids</i>						EPA # <i>CA2000191536</i>			
Check >	Regulated Constituent Common Name	WW Standard mg/l	NAW Standard mg/kg unless TCLP	Check >	Regulated Constituent Common Name	WW Standard mg/l	NAW Standard mg/kg unless TCLP	Check >	Regulated Constituent Common Name	WW Standard mg/l	NAW Standard mg/kg unless TCLP
001	Acenaphthylene	0.059	3.4 073	1-1 Dichloroethylene	0.025	6 145	5-Nitro-o-toluidine	0.32	28		
002	Acenaphthene	0.059	3.4 074	trans-1,2-Dichloroethylene	0.054	30 146	o-Nitrophenol	0.028	19		
003	Acetone	0.28	160 075	2,4-Dichlorophenol	0.044	14 147	p-Nitrophenol	0.12	29		
004	Acetonitrile	5.6	38 076	2,6-Dichlorophenol	0.044	14 148	N-Nitrosodiethylamine	0.4	28		
005	Acetophenone	0.01	9.7 077	2,4-Dichlorophenoxyacetic acid/2,4-D	0.72	10 149	N-Nitrosodimethylamine	0.4	2.3		
006	2-Acetylaminofluorene	0.059	140 078	1,2-Dichloropropane	0.85	18 150	N-Nitroso-di-n-butylamine	0.4	17		
007	Acrolein	0.29	NA 079	cis-1,3-Dichloropropylene	0.036	18 151	N-Nitrosomethyl ethylamine	0.4	2.3		
008	Acrylamide	19	23 080	trans-1,3-Dichloropropylene	0.036	18 152	N-Nitrosomorpholine	0.4	2.3		
009	Acrylonitrile	0.24	84 081	Dieldrin	0.017	0.13 153	N-Nitrosopiperidine	0.013	35		
010	Aldrin	0.021	0.066 082	Diethyl phthalate	0.2	28 154	N-Nitrosopyrrolidine	0.013	35		
011	4-Aminobiphenyl	0.13	NA 083	p-Dimethylaminoazobenzene	0.13	NA 155	Parathion	0.014	4.6		
012	Aniline	0.81	14 084	2,4-Dimethyl phenol	0.036	14 156	Total PCBs	0.1	10		
013	Anthracene	0.059	3.4 085	Dimethyl phthalate	0.047	28 157	Pentachlorobenzene	0.055	10		
014	Aramid	0.36	NA 086	Di-n-butyl phthalate	0.057	28 158	Pentachlorodibenzo-p-dioxins	0.00063	0.001		
015	alpha-BHC	0.00014	0.066 087	1,4-Dinitrobenzene	0.32	2.3 159	Pentachlorodibenzo-furans	0.00035	0.001		
016	beta-BHC	0.00014	0.066 088	4,6-Dinitro-o-cresol	0.28	160 160	Pentachloroethane	0.055	6		
017	delta-BHC	0.023	0.066 089	2,4-Dinitrophenol	0.12	160 161	Pentachloronitrobenzene	0.055	4.8		
018	gamma-BHC	0.0017	0.066 090	2,4-Dinitrotoluene	0.32	140 162	Pentachlorophenol	0.089	7.4		
019	Benzene	0.14	10 091	2,6-Dinitrotoluene	0.55	28 163	Phenacetin	0.081	16		
020	Benz(a)anthracene	0.059	3.4 092	Di-n-octyl phthalate	0.017	28 164	Phenanthrene	0.059	5.6		
021	Benzal chloride	0.055	6 093	Di-n-propylnitrosamine	0.4	14 165	Phenol	0.039	6.2		
022	Benzo(b) fluoranthene	0.11	6.8 094	1,4-Dioxane	12	170 166	Phorate	0.021	4.5		
023	Benzo(k) fluoranthene	0.11	6.8 095	Diphenylamine	0.92	13 167	Phthalic acid	0.055	28		
024	Benzo(g,h,i)perylene	0.0055	1.8 096	Diphenylnitrosamine	0.92	13 168	Phthalic anhydride	0.055	28		
025	Benzo(a) pyrene	0.061	3.4 097	2,1-Diphenylhydrazine	0.087	NA 169	Pronamide	0.093	1.5		
026	Bromodichloromethane	0.35	15 098	Disulfoton	0.017	6.2 170	Pyrene	0.067	8.2		
027	Bromomethane/Methyl bromide	0.11	15 099	Endosulfan I	0.023	0.066 171	Pyridine	0.014	16		
028	4-Bromophenyl phenyl ether	0.055	15 100	Endosulfan II	0.029	0.13 172	Saflor	0.081	22		
029	n-Butyl alcohol	5.6	2.6 101	Endosulfan sulfate	0.029	0.13 173	Silvex/2,4,5-TP	0.72	7.9		
030	Butyl benzyl phthalate	0.017	28 102	Endrin	0.0028	0.13 174	1,2,4,5-Tetrachlorobenzene	0.055	14		
031	2-sec-Butyl-4,6 dinitrophenol/Dir	0.066	2.5 103	Endrin aldehyde	0.025	0.13 175	Tetrachlorodibenzo-p-dioxins	0.00063	0.001		
032	Carbon disulfide	3.8	4.8 mg/l TCLP 104	Ethyl Acetate	0.34	33 176	Tetrachlorodibenzofurans	0.00063	0.001		
033	Carbon tetrachloride	0.057	6 105	Ethyl benzene	0.057	10 177	1,1,1,2-Tetrachloroethane	0.057	6		
034	Chlorane (alpha and gamma isomers)	0.0033	0.26 106	Ethyl cyanide/Propanenitrile	0.24	360 178	1,1,2,2-Tetrachloroethane	0.057	6		
035	p-Chloroaniline	0.46	16 107	Ethyl ether	0.12	160 179	Tetrachloroethylene	0.056	6		
036	Chlorobenzene	0.057	6 108	bis(2-Ethylhexyl) phthalate	0.28	28 180	2,3,4,6-Tetrachlorophenol	0.03	7.4		
037	Chlorobenzilate	0.1	NA 109	Ethyl methacrylate	0.14	160 181	Toluene	0.08	10		
038	2-Chloro-1,3-butadiene	0.057	0.28 110	Ethylene oxide	0.12	NA 182	Toxaphene	0.0095	2.6		
039	Chlorodibromomethane	0.057	15 111	Famphur	0.017	15 183	Trichloromethane/Bromoform	0.63	15		
040	Chloroethane	0.27	5 112	Flouanthene	0.068	3.4 184	1,2,4 Trichlorobenzene	0.055	19		
041	bis(2-Chloroethoxy)methane	0.036	7.2 113	Fluorene	0.059	3.4 185	1,1,1-Trichloroethane	0.054	6		
042	bis(2-Chloroethyl)ether	0.033	6 114	Heptachlor	0.0012	0.066 186	1,1,2-Trichloroethane	0.054	6		
043	Chloroform	0.046	6 115	Heptachlor epoxide	0.016	0.066 187	Trichloroethylene	0.054	6		
044	bis(2-Chloroisopropyl)ether	0.055	7.2 116	Hexachlorobenzene	0.055	10 188	Trichloromonochloromethane	0.02	30		
045	p-Chloro-m-cresol	0.018	14 117	Hexachlorobutadiene	0.055	5.6 189	2,4,5-Trichlorophenol	0.18	7.4		
046	2-Chloroethyl vinyl ether	0.062	NA 118	Hexachlorocyclopentadiene	0.057	2.4 190	2,4,6-Trichlorophenol	0.035	7.4		
047	Chloromethane/Methyl chloride	0.19	30 119	Hazachlorodibenzo-p-dioxins & furans	0.000063	0.001 191	2,4,5-Trichlorophenoxyacetic acid/2,4,5T	0.72	7.9		
048	2-chloronaphthalene	0.055	5.6 120	Hexachloroethane	0.055	30 192	1,2,3-Trichloropropane	0.85	30		
049	2-Chlorophenol	0.044	5.7 121	hexachloropropylene	0.035	30 193	1,1,2 Trichloro-1,2,2-trifluoroethane	0.057	30		
050	3-Chloropropylene	0.036	30 122	Indeno (1,2,3-c,d) pyrene	0.0055	3.4 194	tris(2,3 Dibromopropyl) phosphate	0.11	0.1		
051	Chrysene	0.059	3.4 123	Iodomethane	0.19	65 195	Vinyl chloride	0.27	6		
052	o-Cresol	0.11	5.6 124	Isobutyl alcohol	5.6	170 196	Xylenes-Total	0.32	30		
053	m-Cresol	0.77	5.6 125	Isodrin	0.021	0.066 197	Antimony	1.9	2.1mg/l TCLP		
054	p-Cresol	0.77	5.6 126	Isosafrole	0.081	2.6 198	Arsenic	1.4	5.0mg/l TCLP		
055	Cyclohexanone	0.36	0.75mg/l TCLP 127	Kepone	0.0011	0.13 199	Barium	1.2	7.6mg/l TCLP		
056	o,p'-DDD	0.023	0.087 128	Methacrylonitrile	0.24	84 200	Beryllium	0.85	0.014mg/l TCLP		
057	p,p'-DDD	0.023	0.087 129	Methanol	5.6	0.75mg/l TCLP 201	Cadmium	0.69	0.19mg/l TCLP		
058	o,p'-DDE	0.031	0.087 130	Methapyrene	0.081	1.5 202	Chromium (Total)	2.77	0.86mg/l TCLP		
059	p,p'-DDE	0.031	0.087 131	Methoxychlor	0.25	0.18 203	Cyanide (Total)	1.2	590		
060	o,p'-DDT	0.0039	0.087 132	3-Methylcholanthrene	0.0055	15 204	Cyanide (Amenable)	0.86	30		
061	p,p'-DDT	0.0039	0.087 133	4,4-Methylene bis(2-chloroaniline)	0.5	30 205	Flouride	35	NA		
062	Dibenz(a,h)anthracene	0.055	8.2 134	Methylene chloride	0.089	30 206	Lead	0.69	0.37mg/l TCLP		
063	Debenzo(a,e)pyrene	0.061	NA 135	Methyl ethyl ketone	0.28	36 207	Mercury-Nonwastewater from Refort	NA	0.20mg/l TCLP		
064	1,2-Dibromo-3-chloropropane	0.11	15 136	Methyl isobutyl ketone	0.14	33 208	Mercury-All Others	0.15	0.025mg/l TCLP		
065	1,2-Dibromomethane/ethylene dibromide	0.028	15 137	Methyl methacrylate	0.14	160 209	Nickel	3.98	5.0mg/l TCLP		
066	Dibromomethane	0.11	15 138	Methyl methansulfonate	0.018	NA 210	Selenium	0.82	0.16mg/TCLP		
067	m-Dichlorobenzene	0.036	6 139	Methyl parathion	0.014	4.6 211	Silver	0.43	0.30mg/l TCLP		
068	o-Dichlorobenzene	0.088	6 140	Naphthalene	0.059	5.6 212	Sulfida	14	NA		
069	p-Dichlorobenzene	0.09	6 141	2-Naphthylamine	0.52	NA 213	Thallium	1.4	0.078mg/l TCLP		
070	Dichlorodifluoromethane	0.23	7.2 142	o-Nitroaniline	0.27	14 214	Vanadium	4.3	0.23mg/l TCLP		
071	1,1-Dichloroethane	0.059	6 143	p-Nitroaniline	0.028	28 215	Zinc	2.51	5.3mg/l TCLP		
072	1,2-Dichloroethane	0.21	6 144	Nitrobenzene	0.068	14					



Rho Chem Corporation,
a wholly owned subsidiary of PHILIP SERVICES CORP.,
RCRA Land Disposal Restriction Notification Form EZ

Generator: SPACE EXPLORATION TECH. U.S. EPA I.D. #: CAR000191536

Profile # 389948-00 Manifest #: 000697922JJK

The wastes identified on this form are subject to the land disposal restrictions of 40 CFR Part 268. The wastes do not meet the treatment standards specified in 268.32. Pursuant to 40 CFR 268.7(a), the required information applicable to each waste is identified below (check all boxes that apply):

Treatability Group: ☐ Wastewater ☒ Nonwastewater
(Wastewaters contain less than 1% filterable solids and less than 1% Total Organic Carbon)

D001 Ignitable (except for High TOC) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems
(Complete form UC, unless D001 is the only "D" code and the waste is to be combusted or recovered.)

☒ D001 Ignitable (except for High TOC) managed in CWA/ CWA-equivalent/Class I SDWA systems

☐ D001 High TOC Ignitable (greater than 10% total organic carbon)

D002 Corrosive managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems (Complete form UC)

☐ D002 Corrosive managed in CWA/ CWA-equivalent/Class I SDWA systems

☐ D003 Reactive Sulfides based on 261.23(a)(5)

☐ D003 Reactive Cyanides based on 261.23(a)(5)

D003 Water Reactives based on 261.23(a)(2),(3) and (4) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems (Complete form UC)

☐ D003 Water Reactives based on 261.23(a)(2),(3) and (4) managed in CWA/ CWA-equivalent/Class I SDWA systems

☐ D003 Other Reactives based on 261.23(a)(1) (Complete form UC)

If D004-43 boxes are checked, complete and attach Form UC to address underlying hazardous constituents (unless these wastes are to be managed in CWA/CWA-equivalent/Class I SDWA systems):

- | | | | |
|--|--|---|--|
| <input type="checkbox"/> D004 Arsenic | <input type="checkbox"/> D005 Barium | <input type="checkbox"/> D006 Cadmium | <input type="checkbox"/> D006 Cadmium-containing batteries |
| <input type="checkbox"/> D007 Chromium | <input type="checkbox"/> D008 Lead | <input type="checkbox"/> D008 Lead acid batteries | |
| <input type="checkbox"/> D009 High mercury inorganic (>260 mg/kg total), including incinerator residue and residues from RMERC | | | |
| <input type="checkbox"/> D009 High-mercury organic (>260 mg/kg total), not including incinerator residue | | | |
| <input type="checkbox"/> D009 Low-mercury (<260 mg/kg total) | <input type="checkbox"/> D009 All D009 wastewaters | | |
| <input type="checkbox"/> D010 Selenium | <input type="checkbox"/> D011 Silver | | |
| <input type="checkbox"/> D012 Endrin | <input type="checkbox"/> D023 o-Cresol | <input type="checkbox"/> D033 Hexachlorobutadiene | |
| <input type="checkbox"/> D013 Lindane | <input type="checkbox"/> D024 m-Cresol | <input type="checkbox"/> D034 Hexachloroethane | |
| <input type="checkbox"/> D014 Methoxychlor | <input type="checkbox"/> D025 p-Cresol | <input type="checkbox"/> D035 Methyl ethyl ketone | |
| <input type="checkbox"/> D015 Toxaphene | <input type="checkbox"/> D026 Cresols (Total) | <input type="checkbox"/> D036 Nitrobenzene | |
| <input type="checkbox"/> D016 2,4-D | <input type="checkbox"/> D027 p-Dichlorobenzene | <input type="checkbox"/> D037 Pentachlorophenol | |
| <input type="checkbox"/> D017 2,4,5-TP (Silvex) | <input type="checkbox"/> D028 1,2-Dichloroethane | <input type="checkbox"/> D038 Pyridine | |
| <input type="checkbox"/> D018 Benzene | <input type="checkbox"/> D029 1,1-Dichloroethylene | <input type="checkbox"/> D039 Tetrachloroethylene | |
| <input type="checkbox"/> D019 Carbon tetrachloride | <input type="checkbox"/> D030 2,4-Dinitrotoluene | <input type="checkbox"/> D040 Trichloroethylene | |
| <input type="checkbox"/> D020 Chlordane | <input type="checkbox"/> D031 Heptachlor | <input type="checkbox"/> D041 2,4,5-Trichlorophenol | |
| <input type="checkbox"/> D021 Chlorobenzene | <input type="checkbox"/> D032 Hexachlorobenzene | <input type="checkbox"/> D042 2,4,6-Trichlorophenol | |
| <input type="checkbox"/> D022 Chloroform | | <input type="checkbox"/> D043 Vinyl chloride | |

Note: If any bolded entries are checked, form UC must be completed to address underlying hazardous constituents, unless the material is treated in a Clean Water Act (CWA) treatment process or unless otherwise noted above.

In addition, the following wastes are included in this shipment:

xx F001-F005 spent solvents. (If this box is checked, complete the F001-F005 section on the back of this form. Check the hazardous waste number(s) that applies, and identify the constituents likely to be present in the waste.)

If this shipment carries additional waste codes that are not addressed above, identify them here:

<u>EPA Waste Code</u>	<u>Subcategory (if applicable)</u>	<u>EPA Waste Code</u>	<u>Subcategory (if applicable)</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

F001-F005 Spent Solvents

Check the box(es) that applies; identify the individual constituents likely to be present.

<u>Hazardous waste description</u>	<u>Regulated hazardous constituents</u>	
<input type="checkbox"/> F001 Spent halogenated solvents used in degreasing	Carbon tetrachloride Tetrachloroethylene Trichloroethylene Trichloromonofluoromethane	Methylene chloride 1,1,1-Trichloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane
<input type="checkbox"/> F002 Spent halogenated solvents	Chlorobenzene Methylene chloride 1,1,1-Trichloroethane Trichloroethylene Trichloromonofluoromethane	<i>o</i> -Dichlorobenzene Tetrachloroethylene 1,1,2-Trichloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane
F003 Spent non-halogenated solvents	Acetone Cyclohexanone* Ethyl benzene Methanol* Xylenes (total)	<i>n</i> -Butyl alcohol Ethyl acetate Ethyl ether Methyl isobutyl ketone
<input type="checkbox"/> F004 Spent non-halogenated solvents	<i>m</i> -Cresol <i>p</i> -Cresol Nitrobenzene	<i>o</i> -Cresol Cresol-mixed isomers (cresylic acid)
X F005 Spent non-halogenated solvents	Benzene 2-Ethoxyethanol Methyl ethyl ketone Pyridine	Carbon disulfide* Isobutyl alcohol 2-Nitropropane Toluene

*The treatment standards for carbon disulfide, cyclohexanone, and methanol nonwastewaters are based on the TCLP and apply to spent solvent nonwastewaters containing only one, two, or all three of these constituents. The treatment standards for these three constituents do not apply when any of the other F001-F constituents are present in the waste.

Hazardous Debris

- ☐ This shipment contains hazardous debris that will be treated to comply with the alternative treatment standards of 268.45 (e.g., macroencapsulation or at blasting).

(The definitions of "debris" and "hazardous debris" are in 40 CFR 268.2. Per 268.45, hazardous debris must be treated for each "contaminant subject to treatment." To determine these, look up the waste code in 268.40 and list the regulated hazardous constituents for each code.)

The contaminants subject to treatment for this debris are identified below:

<u>EPA Waste Code</u>	<u>Subcategory</u>	<u>Contaminants subject to treatment</u>	
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

**Rho Chem Corporation,
a wholly owned subsidiary of PHILIP SERVICES CORP.,
RCRA Land Disposal Restriction Notification Form UC**

Generator: SPACE EXPLORATION TECH. U.S. EPA I.D. #: CAR000191536

Profile #: 389948-00 Manifest #: 000697922JJK

In accordance with 40 CFR 268.7(a), the underlying hazardous constituents must be addressed in this waste. Per 268.2(i), "underlying hazardous constituent" means any constituent listed in 268.48, Table UTS—Universal Treatment Standard which can reasonably be expected to be present at the point of generation of the hazardous waste, at a concentration above the constituent-specific UTS treatment standard. Refer to Form-EZ (attached) for the waste code(s), treatability group, and subcategory applicable to this waste.

In order to address underlying hazardous constituents in characteristic wastes, please check the appropriate box:

- ☐ I have reviewed the UTS list of 268.48, and per 268.7(a), I have determined that there are no underlying hazardous constituents reasonably expected to be present in this waste.
- ☒ I have reviewed the UTS list of 268.48, and per 268.7(a), I have determined that underlying hazardous constituents are present in this waste. The underlying hazardous constituents are identified as follows:

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

The determination of underlying hazardous constituents was based on:

- ☒ Generator's knowledge of the waste
- ☐ Analysis

I certify that I personally have examined and am familiar with the waste through analysis and testing, or through knowledge of the waste to support this certification. I certify that as an authorized representative of the generator named above, all the information submitted in this notification is true and correct to the best of my knowledge.

Traceli Rodriguez
Printed Name

De. B. on Behalf of
Signature Space Ex.

8/20/08
Date

List of Underlying Hazardous Constituents 40 CFR 268.48

Circle or otherwise identify the underlying hazardous constituents present in the waste:

Organic Constituent	Organic Constituent	Organic Constituent	Organic Constituent
A2213	2-Chlorophenol	Ethyl acetate	Oxamyl
Acenaphthylene	3-Chloropropylene	Ethyl benzene	Parathion
Acenaphthene	Chrysene	Ethyl cyanide/Propanenitrile	Total PCBs(sum of all isomers, or all
Aroclors)			
Acetone	<i>o</i> -Cresol	Ethyl ether	Pebulate
Acetonitrile	<i>m</i> -Cresol	bis(2-Ethylhexyl)phthalate	Pentachlorobenzene
Acetophenone	<i>p</i> -Cresol	Ethyl methacrylate	PeCDDs(All Pentachlorodibenzo- <i>p</i> -dioxi
2-Acetylaminofluorene	<i>m</i> -Cumenyl methylcarbamate	Ethylene oxide	PeCDFs(All Pentachlorodibenzofurans)
Acrolein	Cyclohexanone	Famphur	Pentachloroethane
Acrylamide	<i>o,p'</i> -DDD	Fluoranthene	Pentachloronitrobenzene
Acrylonitrile	<i>p,p'</i> -DDD	Fluorene	Pentachlorophenol
Aldicarb sulfone	<i>o,p'</i> -DDE	Formetanate hydrochloride	Phenacetin
Aldrin	<i>p,p'</i> -DDE	Formparanate	Phenanthrene
4-Aminobiphenyl	<i>o,p'</i> -DDT	Heptachlor	Phenol
Aniline	<i>p,p'</i> -DDT	Heptachlor epoxide	<i>o</i> -Phenylenediamine
Anthracene	Dibenz(a,h)anthracene	Hexachlorobenzene	Phorate
Aramite	Dibenz(a,e)pyrene	Hexachlorobutadiene	Phthalic acid
alpha-BHC	1,2-Dibromo-3-chloropropane	Hexachlorocyclopentadiene	Phthalic anhydride
beta-BHC	1,2-Dibromoethane/Ethylene dibromide	HxCDDs(All Hexachlorodibenzo- <i>p</i> -dioxins)	Physostigmine
delta-BHC	Dibromomethane	HxCDFs(All Hexachlorodibenzofurans)	Physostigmine salicylate
gamma-BHC	<i>m</i> -Dichlorobenzene	Hexachloroethane	Promecarb
Barban	<i>o</i> -Dichlorobenzene	Hexachloropropylene	Pronamide
Bendiocarb	<i>p</i> -Dichlorobenzene	Indeno(1,2,3- <i>c,d</i>)pyrene	Propam
Bendiocarb phenol	Dichlorodifluoromethane	Iodomethane	Propoxur
Benomyl	1,1-Dichloroethane	Isobutyl alcohol	Prosulfocarb
Benzene	1,2-Dichloroethane	Isodrin	Pyrene
Benz(a)anthracene	1,1-Dichloroethylene	Isolan	Pyridine
Benzal chloride	<i>trans</i> -1,2-Dichloroethylene	Isosafrole	Safrole
Benzo(b)fluoranthene	2,4-Dichlorophenol	Kepone	Silvex/2,4,5-TP
Benzo(k)fluoranthene	2,6-Dichlorophenol	Methacrylonitrile	1,2,4,5-Tetrachlorobenzene
Benzo(g,h,i)perylene	2,4-Dichlorophenoxyacetic acid/2,4-D	Methanol	TCDDs(All Tetrachlorodibenzo- <i>p</i> -dioxins)
Benzo(a)pyrene	1,2-Dichloropropane	Methapyrilene	TCDFs(All Tetrachlorodibenzofurans)
Bromodichloromethane	<i>cis</i> -1,3-Dichloropropylene	Methiocarb	1,1,1,2-Tetrachloroethane
Bromomethane/Methyl bromide	<i>trans</i> -1,3-Dichloropropylene	Methomyl	1,1,2,2-Tetrachloroethane
4-Bromophenyl phenyl ether	Dieldrin	Methoxychlor	Tetrachloroethylene
<i>n</i> -Butyl alcohol	Diethylene glycol, dicarbamate	3-Methylcholanthrene	2,3,4,6-Tetrachlorophenol
Butylate	Diethyl phthalate	4,4-Methylene-bis(2-chloroaniline)	Thiodicarb
Butyl benzyl phthalate	<i>p</i> -Dimethylaminoazobenzene	Methylene chloride	Thiophanate-methyl
2-sec-Butyl-4,6-dinitrophenol/Dinoseb	2,4-Dimethyl phenol	Methyl ethyl ketone	Tirpate
Carbaryl	Dimethyl phthalate	Methyl isobutyl ketone	Toluene
Carbenzadim	Dimetilan	Methyl methacrylate	Toxaphene
Carbofuran	Di- <i>n</i> -butyl phthalate	Methyl methansulfonate	Triallate
Carbofuran phenol	1,4-Dinitrobenzene	Methyl parathion	Tribromomethane/Bromoform
Carbon disulfide	4,6-Dinitro- <i>o</i> -cresol	Metolcarb	2,4,6-Tribromophenol
Carbon tetrachloride	2,4-Dinitrophenol	Mexacarbate	1,2,4-Trichlorobenzene
Carbosulfan	2,4-Dinitrotoluene	Molinate	1,1,1-Trichloroethane
Chlordane (alpha and gamma isomers)	2,6-Dinitrotoluene	Naphthalene	1,1,2-Trichloroethane
<i>p</i> -Chloroaniline	Di- <i>n</i> -octyl phthalate	2-Naphthylamine	Trichloroethylene
Chlorobenzene	Di- <i>n</i> -propyl nitrosamine	<i>o</i> -Nitroaniline	Trichloromonofluoromethane
Chlorobenzilate	1,4-Dioxane	<i>p</i> -Nitroaniline	2,4,5-Trichlorophenol
2-Chloro-1,3-butadiene	Diphenylamine	Nitrobenzene	2,4,6-Trichlorophenol
Chlorodibromomethane	Diphenyl nitrosamine	5-Nitro- <i>o</i> -toluidine	2,4,5-Trichlorophenoxyacetic acid/2,4,5-T
Chloroethane	1,2-Diphenylhydrazine	<i>o</i> -Nitrophenol	1,2,3-Trichloropropane
bis(2-Chloroethoxy)methane	Disulfoton	<i>p</i> -Nitrophenol	1,1,2-Trichloro-1,2,2-trifluoroethane
bis(2-Chloroethyl)ether	Dithiocarbamates (total)	N-Nitrosodiethylamine	Triethylamine
Chloroform	Endosulfan I	N-Nitrosodimethylamine	tris-(2,3-Dibromopropyl)phosphate
bis(2-Chloroisopropyl)ether	Endosulfan II	N-Nitroso-di- <i>n</i> -butylamine	Vernolate
<i>p</i> -Chloro- <i>m</i> -cresol	Endosulfan sulfate	N-Nitrosomethyl ethylamine	Vinyl chloride
2-Chloroethyl vinyl ether	Endrin	N-Nitrosomorpholine	Xylenes-mixed isomers
Chloromethane/Methyl chloride concentrations)	Endrin aldehyde	N-Nitrosopiperidine	(sum of <i>o</i> -, <i>m</i> -, and <i>p</i> -xylene
2-Chloronaphthalene	EPTC	N-Nitrosopyrrolidine	
Inorganic Constituent	Inorganic Constituent	Inorganic Constituent	Inorganic Constituent
Antimony	Cadmium	Lead	Silver
Arsenic	Chromium (Total)	Mercury-Nonwastewater from Retort	Sulfides
Barium	Cyanides (Total)	Mercury-All Others	Thallium
Beryllium	Cyanides (Amenable)	Nickel	



Rho Chem Corporation,
a wholly owned subsidiary of PHILIP SERVICES CORP.,
RCRA Land Disposal Restriction Notification Form EZ

Generator: SPACE EXPLORATION TECH. U.S. EPA I.D. #: CAR000191536

Profile # 390575-00, 390574-00

Manifest #: 000697935JJK

The wastes identified on this form are subject to the land disposal restrictions of 40 CFR Part 268. The wastes do not meet the treatment standards specified in 268.32. Pursuant to 40 CFR 268.7(a), the required information applicable to each waste is identified below (check all boxes that apply):

Treatability Group: ☐ Wastewater ☒ Nonwastewater
(Wastewaters contain less than 1% filterable solids and less than 1% Total Organic Carbon)

D001 Ignitable (except for High TOC) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems
(Complete form UC, unless D001 is the only "D" code and the waste is to be combusted or recovered.)

☒ D001 Ignitable (except for High TOC) managed in CWA/ CWA-equivalent/Class I SDWA systems

☐ D001 High TOC Ignitable (greater than 10% total organic carbon)

D002 Corrosive managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems (Complete form UC)

☐ D002 Corrosive managed in CWA/ CWA-equivalent/Class I SDWA systems

☐ D003 Reactive Sulfides based on 261.23(a)(5)

☐ D003 Reactive Cyanides based on 261.23(a)(5)

D003 Water Reactives based on 261.23(a)(2),(3) and (4) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems (Complete form UC)

☐ D003 Water Reactives based on 261.23(a)(2),(3) and (4) managed in CWA/ CWA-equivalent/Class I SDWA systems

☐ D003 Other Reactives based on 261.23(a)(1) (Complete form UC)

If D004-43 boxes are checked, complete and attach Form UC to address underlying hazardous constituents (unless these wastes are to be managed in CWA/CWA-equivalent/Class I SDWA systems):

- | | | | |
|--|--|---|--|
| <input type="checkbox"/> D004 Arsenic | <input type="checkbox"/> D005 Barium | <input type="checkbox"/> D006 Cadmium | <input type="checkbox"/> D006 Cadmium-containing batteries |
| <input type="checkbox"/> D007 Chromium | <input type="checkbox"/> D008 Lead | <input type="checkbox"/> D008 Lead acid batteries | |
| <input type="checkbox"/> D009 High mercury inorganic (>260 mg/kg total), including incinerator residue and residues from RMERC | | | |
| <input type="checkbox"/> D009 High-mercury organic (>260 mg/kg total), not including incinerator residue | | | |
| <input type="checkbox"/> D009 Low-mercury (<260 mg/kg total) | <input type="checkbox"/> D009 All D009 wastewaters | | |
| <input type="checkbox"/> D010 Selenium | <input type="checkbox"/> D011 Silver | | |
| <input type="checkbox"/> D012 Endrin | <input type="checkbox"/> D023 o-Cresol | <input type="checkbox"/> D033 Hexachlorobutadiene | |
| <input type="checkbox"/> D013 Lindane | <input type="checkbox"/> D024 m-Cresol | <input type="checkbox"/> D034 Hexachloroethane | |
| <input type="checkbox"/> D014 Methoxychlor | <input type="checkbox"/> D025 p-Cresol | <input type="checkbox"/> D035 Methyl ethyl ketone | |
| <input type="checkbox"/> D015 Toxaphene | <input type="checkbox"/> D026 Cresols (Total) | <input type="checkbox"/> D036 Nitrobenzene | |
| <input type="checkbox"/> D016 2,4-D | <input type="checkbox"/> D027 p-Dichlorobenzene | <input type="checkbox"/> D037 Pentachlorophenol | |
| <input type="checkbox"/> D017 2,4,5-TP (Silvex) | <input type="checkbox"/> D028 1,2-Dichloroethane | <input type="checkbox"/> D038 Pyridine | |
| <input type="checkbox"/> D018 Benzene | <input type="checkbox"/> D029 1,1-Dichloroethylene | <input type="checkbox"/> D039 Tetrachloroethylene | |
| <input type="checkbox"/> D019 Carbon tetrachloride | <input type="checkbox"/> D030 2,4-Dinitrotoluene | <input type="checkbox"/> D040 Trichloroethylene | |
| <input type="checkbox"/> D020 Chlordane | <input type="checkbox"/> D031 Heptachlor | <input type="checkbox"/> D041 2,4,5-Trichlorophenol | |
| <input type="checkbox"/> D021 Chlorobenzene | <input type="checkbox"/> D032 Hexachlorobenzene | <input type="checkbox"/> D042 2,4,6-Trichlorophenol | |
| <input type="checkbox"/> D022 Chloroform | | <input type="checkbox"/> D043 Vinyl chloride | |

Note: If any bolded entries are checked, form UC must be completed to address underlying hazardous constituents, unless the material is treated in a Clean Water Act (CWA) treatment process or unless otherwise noted above.

In addition, the following wastes are included in this shipment:

xx F001-F005 spent solvents. (If this box is checked, complete the F001-F005 section on the back of this form. Check the hazardous waste number(s) that applies, and identify the constituents likely to be present in the waste.)

If this shipment carries additional waste codes that are not addressed above, identify them here:

<u>EPA Waste Code</u>	<u>Subcategory (if applicable)</u>	<u>EPA Waste Code</u>	<u>Subcategory (if applicable)</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

F001-F005 Spent Solvents

Check the box(es) that applies; identify the individual constituents likely to be present.

Hazardous waste description

Regulated hazardous constituents

<input type="checkbox"/> F001 Spent halogenated solvents used in degreasing	Carbon tetrachloride Tetrachloroethylene Trichloroethylene Trichloromonofluoromethane	Methylene chloride 1,1,1-Trichloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane
<input type="checkbox"/> F002 Spent halogenated solvents	Chlorobenzene Methylene chloride 1,1,1-Trichloroethane Trichloroethylene Trichloromonofluoromethane	<i>o</i> -Dichlorobenzene Tetrachloroethylene 1,1,2-Trichloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane
F003 Spent non-halogenated solvents	Acetone Cyclohexanone* Ethyl benzene Methanol* Xylenes (total)	<i>n</i> -Butyl alcohol Ethyl acetate Ethyl ether Methyl isobutyl ketone
<input type="checkbox"/> F004 Spent non-halogenated solvents	<i>m</i> -Cresol <i>p</i> -Cresol Nitrobenzene	<i>o</i> -Cresol Cresol-mixed isomers (cresylic acid)
F005 Spent non-halogenated solvents	Benzene 2-Ethoxyethanol Methyl ethyl ketone Pyridine	Carbon disulfide* Isobutyl alcohol 2-Nitropropane Toluene

*The treatment standards for carbon disulfide, cyclohexanone, and methanol nonwastewaters are based on the TCLP and apply to spent solvent nonwastewaters containing only one, two, or all three of these constituents. The treatment standards for these three constituents do not apply when any of the other F001-F005 constituents are present in the waste.

Hazardous Debris

- ☐ This shipment contains hazardous debris that will be treated to comply with the alternative treatment standards of 268.45 (e.g., macroencapsulation or air blasting).

(The definitions of "debris" and "hazardous debris" are in 40 CFR 268.2. Per 268.45, hazardous debris must be treated for each "contaminant subject to treatment." To determine these, look up the waste code in 268.40 and list the regulated hazardous constituents for each code.)

The contaminants subject to treatment for this debris are identified below:

<u>EPA Waste Code</u>	<u>Subcategory</u>	<u>Contaminants subject to treatment</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

***Rho Chem Corporation,
a wholly owned subsidiary of PHILIP SERVICES CORP.,
RCRA Land Disposal Restriction Notification Form UC***

Generator: SPACE EXPLORATION TECH. U.S. EPA I.D. #: CAR000191536

Profile #: 390575-00, 390574-00

Manifest #: 000697935JJK

In accordance with 40 CFR 268.7(a), the underlying hazardous constituents must be addressed in this waste. Per 268.2(i), "underlying hazardous constituent" means any constituent listed in 268.48, Table UTS—Universal Treatment Standard which can reasonably be expected to be present at the point of generation of the hazardous waste, at a concentration above the constituent-specific UTS treatment standard. Refer to Form-EZ (attached) for the waste code(s), treatability group, and subcategory applicable to this waste.

In order to address underlying hazardous constituents in characteristic wastes, please check the appropriate box:

- ☐ I have reviewed the UTS list of 268.48, and per 268.7(a), I have determined that there are no underlying hazardous constituents reasonably expected to be present in this waste.
- ☒ I have reviewed the UTS list of 268.48, and per 268.7(a), I have determined that underlying hazardous constituents are present in this waste. The underlying hazardous constituents are identified as follows:

The determination of underlying hazardous constituents was based on:

- ☒ Generator's knowledge of the waste
- ☐ Analysis

I certify that I personally have examined and am familiar with the waste through analysis and testing, or through knowledge of the waste to support this certification. I certify that as an authorized representative of the generator named above, all the information submitted in this notification is true and correct to the best of my knowledge.

Traci Rodriguez
Printed Name

[Signature] on Behalf
Signature of Space Ex.

9/4/08
Date

List of Underlying Hazardous Constituents 40 CFR 268.48

Circle or otherwise identify the underlying hazardous constituents present in the waste:

Organic Constituent	Organic Constituent	Organic Constituent	Organic Constituent
A2213	2-Chlorophenol	Ethyl acetate	Oxamyl
Acenaphthylene	3-Chloropropylene	Ethyl benzene	Parathion
Acenaphthene	Chrysene	Ethyl cyanide/Propanenitrile	Total PCBs(sum of all isomers, or all
Aroclors)			
Acetone	<i>o</i> -Cresol	Ethyl ether	Pebulate
Acetonitrile	<i>m</i> -Cresol	bis(2-Ethylhexyl)phthalate	Pentachlorobenzene
Acetophenone	<i>p</i> -Cresol	Ethyl methacrylate	PeCDDs(All Pentachlorodibenzo- <i>p</i> -dioxin
2-Acetylaminofluorene	<i>m</i> -Cumenyl methylcarbamate	Ethylene oxide	PeCDFs(All Pentachlorodibenzofurans)
Acrolein	Cyclohexanone	Famphur	Pentachloroethane
Acrylamide	<i>o,p'</i> -DDD	Fluoranthene	Pentachloronitrobenzene
Acrylonitrile	<i>p,p'</i> -DDD	Fluorene	Pentachlorophenol
Aldicarb sulfone	<i>o,p'</i> -DDE	Formetanate hydrochloride	Phenacetin
Aldrin	<i>p,p'</i> -DDE	Formparanate	Phenanthrene
4-Aminobiphenyl	<i>o,p'</i> -DDT	Heptachlor	Phenol
Aniline	<i>p,p'</i> -DDT	Heptachlor epoxide	<i>o</i> -Phenylenediamine
Anthracene	Dibenz(a,h)anthracene	Hexachlorobenzene	Phorate
Aramite	Dibenz(a,e)pyrene	Hexachlorobutadiene	Phthalic acid
alpha-BHC	1,2-Dibromo-3-chloropropane	Hexachlorocyclopentadiene	Phthalic anhydride
beta-BHC	1,2-Dibromoethane/Ethylene dibromide	HxCDDs(All Hexachlorodibenzo- <i>p</i> -dioxins)	Physostigmine
delta-BHC	Dibromomethane	HxCDFs(All Hexachlorodibenzofurans)	Physostigmine salicylate
gamma-BHC	<i>m</i> -Dichlorobenzene	Hexachloroethane	Promecarb
Barban	<i>o</i> -Dichlorobenzene	Hexachloropropylene	Pronamide
Bendiocarb	<i>p</i> -Dichlorobenzene	Indeno(1,2,3- <i>c,d</i>)pyrene	Propam
Bendiocarb phenol	Dichlorodifluoromethane	Iodomethane	Propoxur
Benomyl	1,1-Dichloroethane	Isobutyl alcohol	Prosulfocarb
Benzene	1,2-Dichloroethane	Isodrin	Pyrene
Benz(a)anthracene	1,1-Dichloroethylene	Isolan	Pyridine
Benzal chloride	<i>trans</i> -1,2-Dichloroethylene	Isosafrole	Safrole
Benzo(b)fluoranthene	2,4-Dichlorophenol	Kepone	Silvex/2,4,5-TP
Benzo(k)fluoranthene	2,6-Dichlorophenol	Methacrylonitrile	1,2,4,5-Tetrachlorobenzene
Benzo(g,h,i)perylene	2,4-Dichlorophenoxyacetic acid/2,4-D	Methanol	TCDDs(All Tetrachlorodibenzo- <i>p</i> -dioxins
Benzo(a)pyrene	1,2-Dichloropropane	Methapyrilene	TCDFs(All Tetrachlorodibenzofurans)
Bromodichloromethane	<i>cis</i> -1,3-Dichloropropylene	Methiocarb	1,1,1,2-Tetrachloroethane
Bromomethane/Methyl bromide	<i>trans</i> -1,3-Dichloropropylene	Methomyl	1,1,2,2-Tetrachloroethane
4-Bromophenyl phenyl ether	Dieldrin	Methoxychlor	Tetrachloroethylene
<i>n</i> -Butyl alcohol	Diethylene glycol, dicarbamate	3-Methylcholanthrene	2,3,4,6-Tetrachlorophenol
Butylate	Diethyl phthalate	4,4-Methylene-bis(2-chloroaniline)	Thiodicarb
Butyl benzyl phthalate	<i>p</i> -Dimethylaminoazobenzene	Methylene chloride	Thiophanate-methyl
2-sec-Butyl-4,6-dinitrophenol/Dinoseb	2,4-Dimethyl phenol	Methyl ethyl ketone	Tirpate
Carbaryl	Dimethyl phthalate	Methyl isobutyl ketone	Toluene
Carbenzadim	Dimetilan	Methyl methacrylate	Toxaphene
Carbofuran	Di- <i>n</i> -butyl phthalate	Methyl methansulfonate	Triallate
Carbofuran phenol	1,4-Dinitrobenzene	Methyl parathion	Tribromomethane/Bromoform
Carbon disulfide	4,6-Dinitro- <i>o</i> -cresol	Metolcarb	2,4,6-Tribromophenol
Carbon tetrachloride	2,4-Dinitrophenol	Mexacarbate	1,2,4-Trichlorobenzene
Carbosulfan	2,4-Dinitrotoluene	Molinate	1,1,1-Trichloroethane
Chlordane (alpha and gamma isomers)	2,6-Dinitrotoluene	Naphthalene	1,1,2-Trichloroethane
<i>p</i> -Chloroaniline	Di- <i>n</i> -octyl phthalate	2-Naphthylamine	Trichloroethylene
Chlorobenzene	Di- <i>n</i> -propyl nitrosamine	<i>o</i> -Nitroaniline	Trichloromonofluoromethane
Chlorobenzilate	1,4-Dioxane	<i>p</i> -Nitroaniline	2,4,5-Trichlorophenol
2-Chloro-1,3-butadiene	Diphenylamine	Nitrobenzene	2,4,6-Trichlorophenol
Chlorodibromomethane	Diphenylnitrosamine	5-Nitro- <i>o</i> -toluidine	2,4,5-Trichlorophenoxyacetic acid/2,4,5-T
Chloroethane	1,2-Diphenylhydrazine	<i>o</i> -Nitrophenol	1,2,3-Trichloropropane
bis(2-Chloroethoxy)methane	Disulfoton	<i>p</i> -Nitrophenol	1,1,2-Trichloro-1,2,2-trifluoroethane
bis(2-Chloroethyl)ether	Dithiocarbamates (total)	N-Nitrosodiethylamine	Triethylamine
Chloroform	Endosulfan I	N-Nitrosodimethylamine	tris-(2,3-Dibromopropyl)phosphate
bis(2-Chloroisopropyl)ether	Endosulfan II	N-Nitroso-di- <i>n</i> -butylamine	Vernolate
<i>p</i> -Chloro- <i>m</i> -cresol	Endosulfan sulfate	N-Nitrosomethylethylamine	Vinyl chloride
2-Chloroethyl vinyl ether	Endrin	N-Nitrosomorpholine	Xylenes-mixed isomers
Chloromethane/Methyl chloride concentrations)	Endrin aldehyde	N-Nitrosopiperidine	(sum of <i>o</i> -, <i>m</i> -, and <i>p</i> -xylene
2-Chloronaphthalene	EPTC	N-Nitrosopyrrolidine	
<u>Inorganic Constituent</u>	<u>Inorganic Constituent</u>	<u>Inorganic Constituent</u>	<u>Inorganic Constituent</u>
Antimony	Cadmium	Lead	Silver
Arsenic	Chromium (Total)	Mercury-Nonwastewater from Retort	Sulfides
Barium	Cyanides (Total)	Mercury-All Others	Thallium
Beryllium	Cyanides (Amenable)	Nickel	

Siemens Water Technologies Corp.

LAND DISPOSAL RESTRICTION NOTIFICATION FORM

Pursuant to CCR Title 22, Section 66268.7(40 CFR 268.7(a), I hereby notify that this waste shipment contains one or more of the following wastes restricted under the land disposal restrictions for which applicable treatment standards are set forth in CCR Title 22, Section 66268.40 (40 CFR 268.40)

Manifest Num# 000764368JJK Generator Name : SPACE EXPLORATION EPA# CAR000191536						
RCRA HAZARDOUS WASTE INFORMATION						
U.S.F. PROFILE NUMBER/ MANIFEST LINE ITEM NUMBER	List all D, F, K, U & P Codes	Subcategory (IF ANY)	WASTEWATER*/ NONWASTEWATER WW NWW		California List ** Per CCR Title 22, Section 66268.32	Hazardous Debris Subject To CCR Title 22, Sec 66268.45
1)AP169390	D006,D007		<input type="checkbox"/>	X	<input type="checkbox"/> For: _____	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>

ADDITIONAL INFORMATION FOR D001, D002, D012-43, F001-5 & F039 WASTE STREAMS: (check one)

☒ There are no underlying hazardous constituents (UHCs) present

☐ There are underlying hazardous constituents (UHCs) present which do not meet treatment standards per CCR Title 22, Section 66268.48
(Use the attached UTS Table and check the appropriate constituent(s) present in the waste stream)

DETERMINATION BASED UPON : (check one)

☒ Knowledge of the process generating the waste and the raw materials used and the reaction products

☐ Results from analytical testing Analytical results attached ☐ YES ☐ NO

TERM DEFINITIONS:

* **WASTEWATER** = per CCR Title 22, Section 66260.10, WASTE THAT CONTAINS LESS THAN 1% BY WEIGHT TOTAL TOXIC ORGANICS (TOCs) AND 1% BY WEIGHT TOTAL SUSPENDED SOLIDS (TSS).

* **CALIFORNIA LIST**= THE FOLLOWING HAZARDOUS WASTES ARE PROHIBITED FROM LAND DISPOSAL: per CCR Title 22, Section 66268.32

- Liquid hazardous waste with a pH less than or equal to 2.0
- Liquid hazardous waste containing PCB's at concentration of greater than or equal to 50 ppm
- Liquid hazardous waste, including free liquids associated with any solids/sludge, containing free cyanide at concentrations greater than or equal to 1,000 mg/L
- Liquid hazardous waste, including free liquids associated with any solids/sludge, containing metals at concentrations greater than or equal to the following:

ARSENIC	500 mg/L	MERCURY	20 mg/L
CADMIUM	100 mg/L	NICKEL	134 mg/L
CHROMIUM	500 mg/L	SELENIUM	100 mg/L
LEAD	500 mg/L	THALLIUM	130 mg/L

- Liquid hazardous waste, that contains HOC's in total concentration greater than or equal to 1,000 mg/L
- Non-liquid RCRA hazardous waste containing HOC's in total concentration greater than or equal to 1,000 mg/L

CERTIFICATION

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification. I believe that the information I have submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment

SPACE EXPLORATION

COMPANY NAME

De B. on Behalf of
AUTHORIZED SIGNATURE *Space Ex.*

06/25/08
DATE



Rho Chem Corporation,
a wholly owned subsidiary of PHILIP SERVICES CORP.,
RCRA Land Disposal Restriction Notification Form EZ

Generator: SPACE EXPLORATION TECH. U.S. EPA I.D. #: CAR000191536

Profile # 387627-00

Manifest #: 000697866JJK

The wastes identified on this form are subject to the land disposal restrictions of 40 CFR Part 268. The wastes do not meet the treatment standards specified in 268.32, Subpart D or do not meet the applicable prohibition levels specified in 268.32. Pursuant to 40 CFR 268.7(a), the required information applicable to each waste is identified below (check all boxes that apply):

Treatability Group: ☐ Wastewater ☒ Nonwastewater
(Wastewaters contain less than 1% filterable solids and less than 1% Total Organic Carbon)

D001 Ignitable (except for High TOC) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems
(Complete form UC, unless D001 is the only "D" code and the waste is to be combusted or recovered.)

☒ D001 Ignitable (except for High TOC) managed in CWA/ CWA-equivalent/Class I SDWA systems

☐ D001 High TOC Ignitable (greater than 10% total organic carbon)

D002 Corrosive managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems (Complete form UC)

☐ D002 Corrosive managed in CWA/ CWA-equivalent/Class I SDWA systems

☐ D003 Reactive Sulfides based on 261.23(a)(5)

☐ D003 Reactive Cyanides based on 261.23(a)(5)

D003 Water Reactives based on 261.23(a)(2),(3) and (4) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems (Complete form UC)

☐ D003 Water Reactives based on 261.23(a)(2),(3) and (4) managed in CWA/ CWA-equivalent/Class I SDWA systems

☐ D003 Other Reactives based on 261.23(a)(1) (Complete form UC)

If D004-43 boxes are checked, complete and attach Form UC to address underlying hazardous constituents (unless these wastes are to be managed in CWA/CWA-equivalent/Class I SDWA systems):

☐ D004 Arsenic ☐ D005 Barium ☐ D006 Cadmium ☐ D006 Cadmium-containing batteries

D007 Chromium D008 Lead ☐ D008 Lead acid batteries

☐ D009 High mercury inorganic (>260 mg/kg total), including incinerator residue and residues from RMERC

☐ D009 High-mercury organic (>260 mg/kg total), not including incinerator residue

☐ D009 Low-mercury (<260 mg/kg total) ☐ D009 All D009 wastewaters

☐ D010 Selenium ☐ D011 Silver

☐ D012 Endrin ☐ D023 o-Cresol ☐ D033 Hexachlorobutadiene

☐ D013 Lindane ☐ D024 m-Cresol ☐ D034 Hexachloroethane

☐ D014 Methoxychlor ☐ D025 p-Cresol ☐ D035 Methyl ethyl ketone

☐ D015 Toxaphene ☐ D026 Cresols (Total) ☐ D036 Nitrobenzene

☐ D016 2,4-D ☐ D027 p-Dichlorobenzene ☐ D037 Pentachlorophenol

☐ D017 2,4,5-TP (Silvex) ☐ D028 1,2-Dichloroethane ☐ D038 Pyridine

☐ D018 Benzene ☐ D029 1,1-Dichloroethylene ☐ D039 Tetrachloroethylene

☐ D019 Carbon tetrachloride ☐ D030 2,4-Dinitrotoluene ☐ D040 Trichloroethylene

☐ D020 Chlordane ☐ D031 Heptachlor ☐ D041 2,4,5-Trichlorophenol

☐ D021 Chlorobenzene ☐ D032 Hexachlorobenzene ☐ D042 2,4,6-Trichlorophenol

☐ D022 Chloroform ☐ D043 Vinyl chloride

Note: If any bolded entries are checked, form UC must be completed to address underlying hazardous constituents, unless the material is treated in a Clean Water Act (CWA) treatment process or unless otherwise noted above.

In addition, the following wastes are included in this shipment:

xx F001-F005 spent solvents. (If this box is checked, complete the F001-F005 section on the back of this form. Check the hazardous waste number(s) that applies, and identify the constituents likely to be present in the waste.)

If this shipment carries additional waste codes that are not addressed above, identify them here:

<u>EPA Waste Code</u>	<u>Subcategory (if applicable)</u>	<u>EPA Waste Code</u>	<u>Subcategory (if applicable)</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

F001-F005 Spent Solvents

Check the box(es) that applies; identify the individual constituents likely to be present.

<u>Hazardous waste description</u>	<u>Regulated hazardous constituents</u>	
<input type="checkbox"/> F001 Spent halogenated solvents used in degreasing	Carbon tetrachloride Tetrachloroethylene Trichloroethylene Trichloromonofluoromethane	Methylene chloride 1,1,1-Trichloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane
<input type="checkbox"/> F002 Spent halogenated solvents	Chlorobenzene Methylene chloride 1,1,1-Trichloroethane Trichloroethylene Trichloromonofluoromethane	<i>o</i> -Dichlorobenzene Tetrachloroethylene 1,1,2-Trichloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane
F003 Spent non-halogenated solvents	Acetone Cyclohexanone* Ethyl benzene Methanol* Xylenes (total)	<i>n</i> -Butyl alcohol Ethyl acetate Ethyl ether Methyl isobutyl ketone
<input type="checkbox"/> F004 Spent non-halogenated solvents	<i>m</i> -Cresol <i>p</i> -Cresol Nitrobenzene	<i>o</i> -Cresol Cresol-mixed isomers (cresylic acid)
X F005 Spent non-halogenated solvents	Benzene 2-Ethoxyethanol Methyl ethyl ketone Pyridine	Carbon disulfide* Isobutyl alcohol 2-Nitropropane Toluene

*The treatment standards for carbon disulfide, cyclohexanone, and methanol nonwastewaters are based on the TCLP and apply to spent solvent nonwastew. containing only one, two, or all three of these constituents. The treatment standards for these three constituents do not apply when any of the other F001-F constituents are present in the waste.

Hazardous Debris

- ☐ This shipment contains hazardous debris that will be treated to comply with the alternative treatment standards of 268.45 (e.g., macroencapsulation or al blasting).

(The definitions of "debris" and "hazardous debris" are in 40 CFR 268.2. Per 268.45, hazardous debris must be treated for each "contam. subject to treatment." To determine these, look up the waste code in 268.40 and list the regulated hazardous constituents for each code.)

The contaminants subject to treatment for this debris are identified below:

<u>EPA Waste Code</u>	<u>Subcategory</u>	<u>Contaminants subject to treatment</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

***Rho Chem Corporation,
a wholly owned subsidiary of PHILIP SERVICES CORP.,
RCRA Land Disposal Restriction Notification Form UC***

Generator: SPACE EXPLORATION TECH. U.S. EPA I.D. #: CAR000191536

Profile #: 387627-00

Manifest #: 000697866JJK

In accordance with 40 CFR 268.7(a), the underlying hazardous constituents must be addressed in this waste. Per 268.2(i), "underlying hazardous constituent" means any constituent listed in 268.48, Table UTS—Universal Treatment Standard which can reasonably be expected to be present at the point of generation of the hazardous waste, at a concentration above the constituent-specific UTS treatment standard. Refer to Form-EZ (attached) for the waste code(s), treatability group, and subcategory applicable to this waste.

In order to address underlying hazardous constituents in characteristic wastes, please check the appropriate box:

- ☐ I have reviewed the UTS list of 268.48, and per 268.7(a), I have determined that there are no underlying hazardous constituents reasonably expected to be present in this waste.
- ☒ I have reviewed the UTS list of 268.48, and per 268.7(a), I have determined that underlying hazardous constituents are present in this waste. The underlying hazardous constituents are identified as follows:

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

The determination of underlying hazardous constituents was based on:

- ☒ Generator's knowledge of the waste
- ☐ Analysis

I certify that I personally have examined and am familiar with the waste through analysis and testing, or through knowledge of the waste to support this certification. I certify that as an authorized representative of the generator named above, all the information submitted in this notification is true and correct to the best of my knowledge.

Araceli Rodriguez
Printed Name

[Signature]
Signature

7/24/08
Date

List of Underlying Hazardous Constituents 40 CFR 268.48

Circle or otherwise identify the underlying hazardous constituents present in the waste:

Organic Constituent	Organic Constituent	Organic Constituent	Organic Constituent
A2213	2-Chlorophenol	Ethyl acetate	Oxamyl
Acenaphthylene	3-Chloropropylene	Ethyl benzene	Parathion
Acenaphthene	Chrysene	Ethyl cyanide/Propanenitrile	Total PCBs(sum of all isomers, or all
Aroclors)			
Acetone	<i>o</i> -Cresol	Ethyl ether	Pebulate
Acetonitrile	<i>m</i> -Cresol	bis(2-Ethylhexyl)phthalate	Pentachlorobenzene
Acetophenone	<i>p</i> -Cresol	Ethyl methacrylate	PeCDDs(All Pentachlorodibenzo- <i>p</i> -dioxi
2-Acetylaminofluorene	<i>m</i> -Cumenyl methylcarbamate	Ethylene oxide	PeCDFs(All Pentachlorodibenzofurans)
Acrolein	Cyclohexanone	Famphur	Pentachloroethane
Acrylamide	<i>o,p'</i> -DDD	Fluoranthene	Pentachloronitrobenzene
Acrylonitrile	<i>p,p'</i> -DDD	Fluorene	Pentachlorophenol
Aldicarb sulfone	<i>o,p'</i> -DDE	Formetanate hydrochloride	Phenacetin
Aldrin	<i>p,p'</i> -DDE	Formparanate	Phenanthrene
4-Aminobiphenyl	<i>o,p'</i> -DDT	Heptachlor	Phenol
Aniline	<i>p,p'</i> -DDT	Heptachlor epoxide	<i>o</i> -Phenylenediamine
Anthracene	Dibenz(a,h)anthracene	Hexachlorobenzene	Phorate
Aramite	Dibenz(a,e)pyrene	Hexachlorobutadiene	Phthalic acid
alpha-BHC	1,2-Dibromo-3-chloropropane	Hexachlorocyclopentadiene	Phthalic anhydride
beta-BHC	1,2-Dibromoethane/Ethylene dibromide	HxCDDs(All Hexachlorodibenzo- <i>p</i> -dioxins)	Physostigmine
delta-BHC	Dibromomethane	HxCDFs(All Hexachlorodibenzofurans)	Physostigmine salicylate
gamma-BHC	<i>m</i> -Dichlorobenzene	Hexachloroethane	Promecarb
Barban	<i>o</i> -Dichlorobenzene	Hexachloropropylene	Pronamide
Bendiocarb	<i>p</i> -Dichlorobenzene	Indeno(1,2,3-c,d)pyrene	Propham
Bendiocarb phenol	Dichlorodifluoromethane	Iodomethane	Propoxur
Benomyl	1,1-Dichloroethane	Isobutyl alcohol	Prosulfocarb
Benzene	1,2-Dichloroethane	Isodrin	Pyrene
Benz(a)anthracene	1,1-Dichloroethylene	Isolan	Pyridine
Benzal chloride	<i>trans</i> -1,2-Dichloroethylene	Isosafrole	Safrole
Benzo(b)fluoranthene	2,4-Dichlorophenol	Kepone	Silvex/2,4,5-TP
Benzo(k)fluoranthene	2,6-Dichlorophenol	Methacrylonitrile	1,2,4,5-Tetrachlorobenzene
Benzo(g,h,i)perylene	2,4-Dichlorophenoxyacetic acid/2,4-D	Methanol	TCDDs(All Tetrachlorodibenzo- <i>p</i> -dioxins
Benzo(a)pyrene	1,2-Dichloropropane	Methapyrilene	TCDFs(All Tetrachlorodibenzofurans)
Bromodichloromethane	<i>cis</i> -1,3-Dichloropropylene	Methiocarb	1,1,1,2-Tetrachloroethane
Bromomethane/Methyl bromide	<i>trans</i> -1,3-Dichloropropylene	Methomyl	1,1,2,2-Tetrachloroethane
4-Bromophenyl phenyl ether	Dieldrin	Methoxychlor	Tetrachloroethylene
<i>n</i> -Butyl alcohol	Diethylene glycol, dicarbamate	3-Methylcholanthrene	2,3,4,6-Tetrachlorophenol
Butylate	Diethyl phthalate	4,4-Methylene-bis(2-chloroaniline)	Thiodicarb
Butyl benzyl phthalate	<i>p</i> -Dimethylaminoazobenzene	Methylene chloride	Thiophanate-methyl
2-sec-Butyl-4,6-dinitrophenol/Dinoseb	2,4-Dimethyl phenol	Methyl ethyl ketone	Tirpate
Carbaryl	Dimethyl phthalate	Methyl isobutyl ketone	Toluene
Carbenzadim	Dimetilan	Methyl methacrylate	Toxaphene
Carbofuran	Di- <i>n</i> -butyl phthalate	Methyl methansulfonate	Triallate
Carbofuran phenol	1,4-Dinitrobenzene	Methyl parathion	Tribromomethane/Bromoform
Carbon disulfide	4,6-Dinitro- <i>o</i> -cresol	Metolcarb	2,4,6-Tribromophenol
Carbon tetrachloride	2,4-Dinitrophenol	Mexacarbate	1,2,4-Trichlorobenzene
Carbosulfan	2,4-Dinitrotoluene	Molinate	1,1,1-Trichloroethane
Chlordane (alpha and gamma isomers)	2,6-Dinitrotoluene	Naphthalene	1,1,2-Trichloroethane
<i>p</i> -Chloroaniline	Di- <i>n</i> -octyl phthalate	2-Naphthylamine	Trichloroethylene
Chlorobenzene	Di- <i>n</i> -propyl nitrosamine	<i>o</i> -Nitroaniline	Trichloromonofluoromethane
Chlorobenzilate	1,4-Dioxane	<i>p</i> -Nitroaniline	2,4,5-Trichlorophenol
2-Chloro-1,3-butadiene	Diphenylamine	Nitrobenzene	2,4,6-Trichlorophenol
Chlorodibromomethane	Diphenyl nitrosamine	5-Nitro- <i>o</i> -toluidine	2,4,5-Trichlorophenoxyacetic acid/2,4,5-T
Chloroethane	1,2-Diphenylhydrazine	<i>o</i> -Nitrophenol	1,2,3-Trichloropropane
bis(2-Chloroethoxy)methane	Disulfoton	<i>p</i> -Nitrophenol	1,1,2-Trichloro-1,2,2-trifluoroethane
bis(2-Chloroethyl)ether	Dithiocarbamates (total)	N-Nitrosodiethylamine	Triethylamine
Chloroform	Endosulfan I	N-Nitrosodimethylamine	tris-(2,3-Dibromopropyl)phosphate
bis(2-Chloroisopropyl)ether	Endosulfan II	N-Nitroso-di- <i>n</i> -butylamine	Vernolate
<i>p</i> -Chloro- <i>m</i> -cresol	Endosulfan sulfate	N-Nitrosomethylethylamine	Vinyl chloride
2-Chloroethyl vinyl ether	Endrin	N-Nitrosomorpholine	Xylenes-mixed isomers
Chloromethane/Methyl chloride concentrations)	Endrin aldehyde	N-Nitrosopiperidine	(sum of <i>o</i> -, <i>m</i> -, and <i>p</i> -xylene
2-Chloronaphthalene	EPTC	N-Nitrosopyrrolidine	
Inorganic Constituent	Inorganic Constituent	Inorganic Constituent	Inorganic Constituent
Antimony	Cadmium	Lead	Silver
Arsenic	Chromium (Total)	Mercury-Nonwastewater from Retort	Sulfides
Barium	Cyanides (Total)	Mercury-All Others	Thallium
Beryllium	Cyanides (Amenable)	Nickel	



**Rho Chem Corporation,
a wholly owned subsidiary of PHILIP SERVICES CORP.,
RCRA Land Disposal Restriction Notification Form EZ**

Generator: SPACE EXPLORATION TECH. U.S. EPA I.D. #: CAR000191536

Profile # 388824-00 Manifest #: 000697867JJK

The wastes identified on this form are subject to the land disposal restrictions of 40 CFR Part 268. The wastes do not meet the treatment standards specified in 268.32. Pursuant to 40 CFR 268.7(a), the required information applicable to each waste is identified below (check all boxes that apply):

Treatability Group: ☐ Wastewater ☒ Nonwastewater
(Wastewaters contain less than 1% filterable solids and less than 1% Total Organic Carbon)

**D001 Ignitable (except for High TOC) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems
(Complete form UC, unless D001 is the only "D" code and the waste is to be combusted or recovered.)**

- ☒ D001 Ignitable (except for High TOC) managed in CWA/ CWA-equivalent/Class I SDWA systems
☐ D001 High TOC Ignitable (greater than 10% total organic carbon)

D002 Corrosive managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems (Complete form UC)

- ☐ D002 Corrosive managed in CWA/ CWA-equivalent/Class I SDWA systems
☐ D003 Reactive Sulfides based on 261.23(a)(5)
☐ D003 Reactive Cyanides based on 261.23(a)(5)

X D003 Water Reactives based on 261.23(a)(2),(3) and (4) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems (Complete form UC)

- ☐ D003 Water Reactives based on 261.23(a)(2),(3) and (4) managed in CWA/ CWA-equivalent/Class I SDWA systems
☐ D003 Other Reactives based on 261.23(a)(1) (Complete form UC)

If D004-43 boxes are checked, complete and attach Form UC to address underlying hazardous constituents (unless these wastes are to be managed in CWA/CWA-equivalent/Class I SDWA systems):

- | | | | |
|--|--|---|--|
| <input type="checkbox"/> D004 Arsenic | <input type="checkbox"/> D005 Barium | <input type="checkbox"/> D006 Cadmium | <input type="checkbox"/> D006 Cadmium-containing batteries |
| <input type="checkbox"/> D007 Chromium | <input type="checkbox"/> D008 Lead | <input type="checkbox"/> D008 Lead acid batteries | |
| <input type="checkbox"/> D009 High mercury inorganic (>260 mg/kg total), including incinerator residue and residues from RMERC | | | |
| <input type="checkbox"/> D009 High-mercury organic (>260 mg/kg total), not including incinerator residue | | | |
| <input type="checkbox"/> D009 Low-mercury (<260 mg/kg total) | <input type="checkbox"/> D009 All D009 wastewaters | | |
| <input type="checkbox"/> D010 Selenium | <input type="checkbox"/> D011 Silver | | |
| <input type="checkbox"/> D012 Endrin | <input type="checkbox"/> D023 o-Cresol | <input type="checkbox"/> D033 Hexachlorobutadiene | |
| <input type="checkbox"/> D013 Lindane | <input type="checkbox"/> D024 m-Cresol | <input type="checkbox"/> D034 Hexachloroethane | |
| <input type="checkbox"/> D014 Methoxychlor | <input type="checkbox"/> D025 p-Cresol | <input type="checkbox"/> D035 Methyl ethyl ketone | |
| <input type="checkbox"/> D015 Toxaphene | <input type="checkbox"/> D026 Cresols (Total) | <input type="checkbox"/> D036 Nitrobenzene | |
| <input type="checkbox"/> D016 2,4-D | <input type="checkbox"/> D027 p-Dichlorobenzene | <input type="checkbox"/> D037 Pentachlorophenol | |
| <input type="checkbox"/> D017 2,4,5-TP (Silvex) | <input type="checkbox"/> D028 1,2-Dichloroethane | <input type="checkbox"/> D038 Pyridine | |
| <input type="checkbox"/> D018 Benzene | <input type="checkbox"/> D029 1,1-Dichloroethylene | <input type="checkbox"/> D039 Tetrachloroethylene | |
| <input type="checkbox"/> D019 Carbon tetrachloride | <input type="checkbox"/> D030 2,4-Dinitrotoluene | <input type="checkbox"/> D040 Trichloroethylene | |
| <input type="checkbox"/> D020 Chlordane | <input type="checkbox"/> D031 Heptachlor | <input type="checkbox"/> D041 2,4,5-Trichlorophenol | |
| <input type="checkbox"/> D021 Chlorobenzene | <input type="checkbox"/> D032 Hexachlorobenzene | <input type="checkbox"/> D042 2,4,6-Trichlorophenol | |
| <input type="checkbox"/> D022 Chloroform | | <input type="checkbox"/> D043 Vinyl chloride | |

Note: If any bolded entries are checked, form UC must be completed to address underlying hazardous constituents, unless the material is treated in a Clean Water Act (CWA) treatment process or unless otherwise noted above.

In addition, the following wastes are included in this shipment:

xx F001-F005 spent solvents. (If this box is checked, complete the F001-F005 section on the back of this form. Check the hazardous waste number(s) that applies, and identify the constituents likely to be present in the waste.)

If this shipment carries additional waste codes that are not addressed above, identify them here:

<u>EPA Waste Code</u>	<u>Subcategory (if applicable)</u>	<u>EPA Waste Code</u>	<u>Subcategory (if applicable)</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

F001-F005 Spent Solvents

Check the box(es) that applies; identify the individual constituents likely to be present.

Hazardous waste description

Regulated hazardous constituents

<input type="checkbox"/> F001 Spent halogenated solvents used in degreasing	Carbon tetrachloride Tetrachloroethylene Trichloroethylene Trichloromonofluoromethane	Methylene chloride 1,1,1-Trichloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane
<input type="checkbox"/> F002 Spent halogenated solvents	Chlorobenzene Methylene chloride 1,1,1-Trichloroethane Trichloroethylene Trichloromonofluoromethane	<i>o</i> -Dichlorobenzene Tetrachloroethylene 1,1,2-Trichloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane
F003 Spent non-halogenated solvents	Acetone Cyclohexanone* Ethyl benzene Methanol* Xylenes (total)	<i>n</i> -Butyl alcohol Ethyl acetate Ethyl ether Methyl isobutyl ketone
<input type="checkbox"/> F004 Spent non-halogenated solvents	<i>m</i> -Cresol <i>p</i> -Cresol Nitrobenzene	<i>o</i> -Cresol Cresol-mixed isomers (cresylic acid)
F005 Spent non-halogenated solvents	Benzene 2-Ethoxyethanol Methyl ethyl ketone Pyridine	Carbon disulfide* Isobutyl alcohol 2-Nitropropane Toluene

*The treatment standards for carbon disulfide, cyclohexanone, and methanol nonwastewaters are based on the TCLP and apply to spent solvent nonwastewaters containing only one, two, or all three of these constituents. The treatment standards for these three constituents do not apply when any of the other F001-F005 constituents are present in the waste.

Hazardous Debris

- ☐ This shipment contains hazardous debris that will be treated to comply with the alternative treatment standards of 268.45 (e.g., macroencapsulation or at blasting).

(The definitions of "debris" and "hazardous debris" are in 40 CFR 268.2. Per 268.45, hazardous debris must be treated for each "contaminant subject to treatment." To determine these, look up the waste code in 268.40 and list the regulated hazardous constituents for each code.)

The contaminants subject to treatment for this debris are identified below:

<u>EPA Waste Code</u>	<u>Subcategory</u>	<u>Contaminants subject to treatment</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

***Rho Chem Corporation,
a wholly owned subsidiary of PHILIP SERVICES CORP.,
RCRA Land Disposal Restriction Notification Form UC***

Generator: SPACE EXPLORATION TECH. U.S. EPA I.D. #: CAR000191536

Profile #: 388824-00

Manifest #: 000697867JJK

In accordance with 40 CFR 268.7(a), the underlying hazardous constituents must be addressed in this waste. Per 268.2(i), "underlying hazardous constituent" means any constituent listed in 268.48, Table UTS—Universal Treatment Standard which can reasonably be expected to be present at the point of generation of the hazardous waste, at a concentration above the constituent-specific UTS treatment standard. Refer to Form-EZ (attached) for the waste code(s), treatability group, and subcategory applicable to this waste.

In order to address underlying hazardous constituents in characteristic wastes, please check the appropriate box:

- ☐ I have reviewed the UTS list of 268.48, and per 268.7(a), I have determined that there are no underlying hazardous constituents reasonably expected to be present in this waste.
- ☒ I have reviewed the UTS list of 268.48, and per 268.7(a), I have determined that underlying hazardous constituents are present in this waste. The underlying hazardous constituents are identified as follows:

The determination of underlying hazardous constituents was based on:

- ☒ Generator's knowledge of the waste
- ☐ Analysis

I certify that I personally have examined and am familiar with the waste through analysis and testing, or through knowledge of the waste to support this certification. I certify that as an authorized representative of the generator named above, all the information submitted in this notification is true and correct to the best of my knowledge.

Graciela Rodriguez
Printed Name

[Signature]
Signature

7/24/08
Date

List of Underlying Hazardous Constituents 40 CFR 268.48

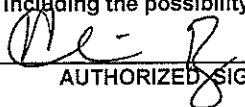
Circle or otherwise identify the underlying hazardous constituents present in the waste:

<u>Organic Constituent</u>	<u>Organic Constituent</u>	<u>Organic Constituent</u>	<u>Organic Constituent</u>
A2213	2-Chlorophenol	Ethyl acetate	Oxamyl
Acenaphthylene	3-Chloropropylene	Ethyl benzene	Parathion
Acenaphthene	Chrysene	Ethyl cyanide/Propanenitrile	Total PCBs(sum of all isomers, or all
Aroclors)			
Acetone	<i>o</i> -Cresol	Ethyl ether	Pebulate
Acetonitrile	<i>m</i> -Cresol	bis(2-Ethylhexyl)phthalate	Pentachlorobenzene
Acetophenone	<i>p</i> -Cresol	Ethyl methacrylate	PeCDDs(All Pentachlorodibenzo- <i>p</i> -dioxi
2-Acetylaminofluorene	<i>m</i> -Cumenyl methylcarbamate	Ethylene oxide	PeCDFs(All Pentachlorodibenzofurans)
Acrolein	Cyclohexanone	Famphur	Pentachloroethane
Acrylamide	<i>o,p'</i> -DDD	Fluoranthene	Pentachloronitrobenzene
Acrylonitrile	<i>p,p'</i> -DDD	Fluorene	Pentachlorophenol
Aldicarb sulfone	<i>o,p'</i> -DDE	Formetanate hydrochloride	Phenacetin
Aldrin	<i>p,p'</i> -DDE	Formparanate	Phenanthrene
4-Aminobiphenyl	<i>o,p'</i> -DDT	Heptachlor	Phenol
Aniline	<i>p,p'</i> -DDT	Heptachlor epoxide	<i>o</i> -Phenylenediamine
Anthracene	Dibenz(a,h)anthracene	Hexachlorobenzene	Phorate
Aramite	Dibenz(a,e)pyrene	Hexachlorobutadiene	Phthalic acid
alpha-BHC	1,2-Dibromo-3-chloropropane	Hexachlorocyclopentadiene	Phthalic anhydride
beta-BHC	1,2-Dibromoethane/Ethylene dibromide	HxCDDs(All Hexachlorodibenzo- <i>p</i> -dioxins)	Physostigmine
delta-BHC	Dibromomethane	HxCDFs(All Hexachlorodibenzofurans)	Physostigmine salicylate
gamma-BHC	<i>m</i> -Dichlorobenzene	Hexachloroethane	Promecarb
Barban	<i>o</i> -Dichlorobenzene	Hexachloropropylene	Pronamide
Bendiocarb	<i>p</i> -Dichlorobenzene	Indeno(1,2,3-c,d)pyrene	Propham
Bendiocarb phenol	Dichlorodifluoromethane	Iodomethane	Propoxur
Benomyl	1,1-Dichloroethane	Isobutyl alcohol	Prosulfocarb
Benzene	1,2-Dichloroethane	Isodrin	Pyrene
Benz(a)anthracene	1,1-Dichloroethylene	Isolan	Pyridine
Benzal chloride	<i>trans</i> -1,2-Dichloroethylene	Isosafrole	Safrole
Benzo(b)fluoranthene	2,4-Dichlorophenol	Kepone	Silvex/2,4,5-TP
Benzo(k)fluoranthene	2,6-Dichlorophenol	Methacrylonitrile	1,2,4,5-Tetrachlorobenzene
Benzo(g,h,i)perylene	2,4-Dichlorophenoxyacetic acid/2,4-D	Methanol	TCDDs(All Tetrachlorodibenzo- <i>p</i> -dioxins
Benzo(a)pyrene	1,2-Dichloropropane	Methapyriline	TCDFs(All Tetrachlorodibenzofurans)
Bromodichloromethane	<i>cis</i> -1,3-Dichloropropylene	Methiocarb	1,1,1,2-Tetrachloroethane
Bromomethane/Methyl bromide	<i>trans</i> -1,3-Dichloropropylene	Methomyl	1,1,2,2-Tetrachloroethane
4-Bromophenyl phenyl ether	Dieldrin	Methoxychlor	Tetrachloroethylene
<i>n</i> -Butyl alcohol	Diethylene glycol, dicarbamate	3-Methylcholanthrene	2,3,4,6-Tetrachlorophenol
Butylate	Diethyl phthalate	4,4-Methylene-bis(2-chloroaniline)	Thiodicarb
Butyl benzyl phthalate	<i>p</i> -Dimethylaminoazobenzene	Methylene chloride	Thiophanate-methyl
2-sec-Butyl-4,6-dinitrophenol/Dinoseb	2,4-Dimethyl phenol	Methyl ethyl ketone	Tirpate
Carbaryl	Dimethyl phthalate	Methyl isobutyl ketone	Toluene
Carbenzadim	Dimetilan	Methyl methacrylate	Toxaphene
Carbofuran	Di- <i>n</i> -butyl phthalate	Methyl methansulfonate	Triallate
Carbofuran phenol	1,4-Dinitrobenzene	Methyl parathion	Tribromomethane/Bromoform
Carbon disulfide	4,6-Dinitro- <i>o</i> -cresol	Metolcarb	2,4,6-Tribromophenol
Carbon tetrachloride	2,4-Dinitrophenol	Mexacarbate	1,2,4-Trichlorobenzene
Carbosulfan	2,4-Dinitrotoluene	Molinate	1,1,1-Trichloroethane
Chlordane (alpha and gamma isomers)	2,6-Dinitrotoluene	Naphthalene	1,1,2-Trichloroethane
<i>p</i> -Chloroaniline	Di- <i>n</i> -octyl phthalate	2-Naphthylamine	Trichloroethylene
Chlorobenzene	Di- <i>n</i> -propylnitrosamine	<i>o</i> -Nitroaniline	Trichloromonofluoromethane
Chlorobenzilate	1,4-Dioxane	<i>p</i> -Nitroaniline	2,4,5-Trichlorophenol
2-Chloro-1,3-butadiene	Diphenylamine	Nitrobenzene	2,4,6-Trichlorophenol
Chlorodibromomethane	Diphenylnitrosamine	5-Nitro- <i>o</i> -toluidine	2,4,5-Trichlorophenoxyacetic acid/2,4,5-T
Chloroethane	1,2-Diphenylhydrazine	<i>o</i> -Nitrophenol	1,2,3-Trichloropropane
bis(2-Chloroethoxy)methane	Disulfoton	<i>p</i> -Nitrophenol	1,1,2-Trichloro-1,2,2-trifluoroethane
bis(2-Chloroethyl)ether	Dithiocarbamates (total)	N-Nitrosodiethylamine	Triethylamine
Chloroform	Endosulfan I	N-Nitrosodimethylamine	tris-(2,3-Dibromopropyl)phosphate
bis(2-Chloroisopropyl)ether	Endosulfan II	N-Nitroso-di- <i>n</i> -butylamine	Vernolate
<i>p</i> -Chloro- <i>m</i> -cresol	Endosulfan sulfate	N-Nitrosomethylethylamine	Vinyl chloride
2-Chloroethyl vinyl ether	Endrin	N-Nitrosomorpholine	Xylenes-mixed isomers
Chloromethane/Methyl chloride concentrations)	Endrin aldehyde	N-Nitrosopiperidine	(sum of <i>o</i> -, <i>m</i> -, and <i>p</i> -xylene
2-Chloronaphthalene	EPTC	N-Nitrosopyrrolidine	
<u>Inorganic Constituent</u>	<u>Inorganic Constituent</u>	<u>Inorganic Constituent</u>	<u>Inorganic Constituent</u>
Antimony	Cadmium	Lead	Silver
Arsenic	Chromium (Total)	Mercury-Nonwastewater from Retort	Sulfides
Barium	Cyanides (Total)	Mercury-All Others	Thallium
Beryllium	Cyanides (Amenable)	Nickel	

Siemens Water Technologies Corp.

LAND DISPOSAL RESTRICTION NOTIFICATION FORM

Pursuant to CCR Title 22, Section 66268.7(40 CFR 268.7(a)), I hereby notify that this waste shipment contains one or more of the following wastes restricted under the land disposal restrictions for which applicable treatment standards are set forth in CCR Title 22, Section 66268.40 (40 CFR 268.40)

Manifest Num# 000697817JJK Generator Name : SPACE EXPLORATION EPA# CAR000191536																						
RCRA HAZARDOUS WASTE INFORMATION																						
U.S.F. PROFILE NUMBER/ MANIFEST LINE ITEM NUMBER	List all D, F, K, U & P Codes	Subcategory (IF ANY)	WASTEWATER*/ NONWASTEWATER WW NWW		California List ** Per CCR Title 22, Section 66268.32	Hazardous Debris Subject To CCR Title 22, Sec 66268.45																
1)P179098	D002,D007		X	<input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>																
2)AP169389	D007		<input type="checkbox"/>	X	<input type="checkbox"/> For: _____	<input type="checkbox"/>																
3)P179026	D007		<input type="checkbox"/>	X	<input type="checkbox"/> For: _____	<input type="checkbox"/>																
4)P178917	D002		<input type="checkbox"/>	X	<input type="checkbox"/> For: _____	<input type="checkbox"/>																
ADDITIONAL INFORMATION FOR D001, D002, D012-43, F001-5 & F039 WASTE STREAMS: (check one)																						
<input checked="" type="checkbox"/> There are no underlying hazardous constituents (UHCs) present <input type="checkbox"/> There are underlying hazardous constituents (UHCs) present which do not meet treatment standards per CCR Title 22, Section 66268.48 (Use the attached UTS Table and check the appropriate constituent(s) present in the waste stream)																						
DETERMINATION BASED UPON : (check one)																						
<input checked="" type="checkbox"/> Knowledge of the process generating the waste and the raw materials used and the reaction products <input type="checkbox"/> Results from analytical testing Analytical results attached <input type="checkbox"/> YES <input type="checkbox"/> NO																						
TERM DEFINITIONS: * WASTEWATER = per CCR Title 22, Section 66260.10, WASTE THAT CONTAINS LESS THAN 1% BY WEIGHT TOTAL TOXIC ORGANICS (TOCs) AND 1% BY WEIGHT TOTAL SUSPENDED SOLIDS (TSS). * CALIFORNIA LIST = THE FOLLOWING HAZARDOUS WASTES ARE PROHIBITED FROM LAND DISPOSAL: per CCR Title 22, Section 66268.32																						
<ul style="list-style-type: none"> Liquid hazardous waste with a pH less than or equal to 2.0 Liquid hazardous waste containing PCB's at concentration of greater than or equal to 50 ppm Liquid hazardous waste, including free liquids associated with any solids/sludge, containing free cyanide at concentrations greater than or equal to 1,000 mg/L Liquid hazardous waste, including free liquids associated with any solids/sludge, containing metals at concentrations greater than or equal to the following: <table border="1"> <tr> <td>ARSENIC</td> <td>500 mg/L</td> <td>MERCURY</td> <td>20 mg/L</td> </tr> <tr> <td>CADMIUM</td> <td>100 mg/L</td> <td>NICKEL</td> <td>134 mg/L</td> </tr> <tr> <td>CHROMIUM</td> <td>500 mg/L</td> <td>SELENIUM</td> <td>100 mg/L</td> </tr> <tr> <td>LEAD</td> <td>500 mg/L</td> <td>THALLIUM</td> <td>130 mg/L</td> </tr> </table> 							ARSENIC	500 mg/L	MERCURY	20 mg/L	CADMIUM	100 mg/L	NICKEL	134 mg/L	CHROMIUM	500 mg/L	SELENIUM	100 mg/L	LEAD	500 mg/L	THALLIUM	130 mg/L
ARSENIC	500 mg/L	MERCURY	20 mg/L																			
CADMIUM	100 mg/L	NICKEL	134 mg/L																			
CHROMIUM	500 mg/L	SELENIUM	100 mg/L																			
LEAD	500 mg/L	THALLIUM	130 mg/L																			
<ul style="list-style-type: none"> Liquid hazardous waste, that contains HOC's in total concentration greater than or equal to 1,000 mg/L Non-liquid RCRA hazardous waste containing HOC's in total concentration greater than or equal to 1,000 mg/L 																						
CERTIFICATION																						
I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification. I believe that the information I have submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment																						
SPACE EXPLORATION					06/19/08																	
COMPANY NAME			AUTHORIZED SIGNATURE		DATE																	



~~SEE INSTRUCTIONS (1,2,3 and 4)~~

[illegible]

Page 1 of .

Araceli Rodriguez / CSP
PRINTED NAME/TITLE

if WASTE WATER (WW) Check to left		CUSTOMER:										WASTE APPROVAL #		
if WASTE WATER (WW) Check to left		WASTE NAME:										EPA #		
Check >	Regulated Constituent Common Name	WW Standard mg/l	NWW Standard mg/kg unless TCLP	Check >	Regulated Constituent Common Name	WW Standard mg/l	NWW Standard mg/kg unless TCLP	Check >	Regulated Constituent Common Name	WW Standard mg/l	NWW Standard mg/kg unless TCLP			
001	Acenaphthylene	0.059	3.4	073	1-1 Dichloroethylene	0.025	6	145	5-Nitro-o-toluidine	0.32	28			
002	Acenaphthene	0.059	3.4	074	trans-1,2-Dichloroethylene	0.054	30	146	o-Nitrophenol	0.028	13			
003	Acetone	0.28	160	075	2,4-Dichlorophenol	0.044	14	147	p-Nitrophenol	0.12	29			
004	Acetonitrile	5.6	38	076	2,6-Dichlorophenol	0.044	14	148	N-Nitrosodiethylamine	0.4	28			
005	Acetophenone	0.01	9.7	077	2,4-Dichlorophenoxyacetic acid/2,4-D	0.72	10	149	N-Nitrosodiamethylamine	0.4	2.3			
006	2-Acetylaminofluorene	0.059	140	078	1,2-Dichloropropane	0.85	18	150	N-Nitroso-di-n-butylamine	0.4	17			
007	Acrolein	0.29	NA	079	cis-1,3-Dichloropropylene	0.036	18	151	N-Nitrosomethylethylamine	0.4	2.3			
008	Acrylamide	19	23	080	trans-1,3-Dichloropropylene	0.036	18	152	N-Nitrosomorpholine	0.4	2.3			
009	Acrylonitrile	0.24	84	081	Dieldrin	0.017	0.13	153	N-Nitrosopiperidine	0.013	35			
010	Aldrin	0.021	0.066	082	Diethyl phthalate	0.2	28	154	N-Nitrosopyrrolidine	0.013	35			
011	4-Aminobiphenyl	0.13	NA	083	p-Dimethylaminoazobenzene	0.13	NA	155	Parathion	0.014	4.6			
012	Aniline	0.81	14	084	2,4-Dimethyl phenol	0.036	14	156	Total PCBs	0.1	10			
013	Anthracene	0.058	3.4	085	Dimethyl phthalate	0.047	28	157	Pentachlorobenzene	0.055	10			
014	Aramite	0.36	NA	086	Di-n-butyl phthalate	0.057	28	158	Pentachlorodibenzo-p-dioxins	0.000063	0.001			
015	alpha-BHC	0.00014	0.066	087	1,4-Dinitrobenzene	0.32	2.3	159	Pentachlorodibenzo-furans	0.000035	0.001			
016	beta-BHC	0.00014	0.066	088	4,6-Dinitro-o-cresol	0.28	160	160	Pentachloroethane	0.065	6			
017	delta-BHC	0.023	0.066	089	2,4-Dinitrophenol	0.12	160	161	Pentachloronitrobenzene	0.055	4.8			
018	gamma-BHC	0.0017	0.066	090	2,4-Dinitrotoluene	0.32	140	162	Pentachlorophenol	0.089	7.4			
019	Benzene	0.14	10	091	2,6-Dinitrotoluene	0.55	28	163	Phenacetin	0.081	18			
020	Benzo(a)anthracene	0.059	3.4	092	Di-n-octyl phthalate	0.017	28	164	Phenanthrene	0.059	5.6			
021	Benzal chloride	0.055	6	093	Di-n-propylnitrosamine	0.4	14	165	Phenol	0.039	6.2			
022	Benzo(b) fluoranthene	0.11	6.8	094	1,4-Dioxane	12	170	166	Phorate	0.021	4.6			
023	Benzo(k) fluoranthene	0.11	6.8	095	Diphenylamine	0.92	13	167	Phthalic acid	0.055	28			
024	Benzo(g,h,i)perylene	0.0055	1.8	096	Diphenylnitrosamine	0.92	13	168	Phthalic anhydride	0.056	28			
025	Benzo(a) pyrene	0.061	3.4	097	2,1-Diphenylhydrazine	0.087	NA	169	Pronamide	0.093	1.5			
026	Bromodichloromethane	0.35	15	098	Disulfoton	0.017	6.2	170	Pyrene	0.067	8.2			
027	Bromomethane/Methyl bromide	0.11	15	099	Endosulfan I	0.023	0.066	171	Pyridine	0.014	16			
028	4-Bromophenyl phenyl ether	0.055	15	100	Endosulfan II	0.029	0.13	172	Saltrol	0.081	22			
029	n-Butyl alcohol	5.6	2.6	101	Endosulfan sulfate	0.029	0.13	173	Silvex/2,4,5-TP	0.72	7.9			
030	Butyl benzyl phthalate	0.017	28	102	Endrin	0.0028	0.13	174	1,2,4,5,6-Tetrachlorobenzene	0.055	14			
031	2-sec-Butyl-4,6-dinitrophenol/Dir	0.066	2.5	103	Endrin aldehyde	0.025	0.13	175	Tetrachlorodi-benzo-p-dioxins	0.00063	0.001			
032	Carbon disulfide	3.8	4.8 mg/l TCLP	104	Ethyl Acetate	0.34	33	176	Tetrachlorodibenzo-furans	0.00063	0.001			
033	Carbon tetrachloride	0.057	6	105	Ethyl benzene	0.057	10	177	1,1,1,2-Tetrachloroethane	0.057	6			
034	Chlordane (alpha and gamma isomers)	0.0033	0.26	106	Ethyl cyanide/Propanenitrile	0.24	360	178	1,1,2,2-Tetrachloroethane	0.057	6			
035	p-Chloroaniline	0.46	16	107	Ethyl ether	0.12	160	179	Tetrachloroethylene	0.056	6			
036	Chlorobenzene	0.057	6	108	bis(2-Ethylhexyl) phthalate	0.28	28	180	2,3,4,6-Tetrachlorophenol	0.03	7.4			
037	Chlorobenzilate	0.1	NA	109	Ethyl methacrylate	0.14	160	181	Toluene	0.08	10			
038	2-Chloro-1,3-butadiene	0.057	0.28	110	Ethylene oxide	0.12	NA	182	Toxaphene	0.0095	2.6			
039	Chlorodibromomethane	0.057	15	111	Famphur	0.017	15	183	Tribromomethane/Bromofom	0.63	15			
040	Chloroethane	0.27	6	112	Flouranthene	0.068	3.4	184	1,2,4 Trichlorobenzene	0.055	19			
041	bis(2-Chloroethoxy)methane	0.036	7.2	113	Fluorene	0.059	3.4	185	1,1,1-Trichloroethane	0.054	6			
042	bis(2-Chloroethyl)ether	0.033	6	114	Heptachlor	0.0012	0.066	186	1,1,2-Trichloroethane	0.054	6			
043	Chloroform	0.046	6	115	Heptachlor epoxide	0.016	0.066	187	Trichloroethylene	0.054	6			
044	bis(2-Chloroisopropyl)ether	0.055	7.2	116	Hexachlorobenzene	0.055	10	188	Trichloromonofluoromethane	0.02	30			
045	p-Chloro-m-cresol	0.018	14	117	Hexachlorobutadiene	0.055	5.6	189	2,4,5-Trichlorophenol	0.18	7.4			
046	2-Chloroethyl vinyl ether	0.062	NA	118	Hexachlorocyclopentadiene	0.057	2.4	190	2,4,6-Trichlorophenol	0.035	7.4			
047	Chloromethane/Methyl chloride	0.19	30	119	Hexachlorodibenzo-p-dioxins & furans	0.000063	0.001	191	2,4,5-Trichlorophenoxyacetic acid/2,4,5-T	0.72	7.9			
048	2-chloronaphthalene	0.055	5.6	120	Hexachloroethane	0.055	39	192	1,2,3-Trichloropropane	0.85	30			
049	2-Chlorophenol	0.044	5.7	121	hexachloropropylene	0.035	30	193	1,1,2 Trichloro-1,2,2, trifluoroethane	0.057	30			
050	3-Chloropropylene	0.036	30	122	indeno (1,2,3-c,d) pyrene	0.0055	3.4	194	bis(2,3 Dibromopropyl) phosphate	0.11	0.1			
051	Chrysene	0.059	3.4	123	Iodomethane	0.19	65	195	Vinyl chloride	0.27	6			
052	o-Cresol	0.11	5.6	124	Isobutyl alcohol	5.6	170	196	Xylenes-Total	0.32	30			
053	m-Cresol	0.77	5.6	125	Isodrin	0.021	0.066	197	Antimony	1.9	2.1mg/l TCLP			
054	p-Cresol	0.77	5.6	126	Isosaltrol	0.081	2.6	198	Arsenic	1.4	5.0mg/l TCLP			
055	Cyclohexanone	0.36	0.75mg/l TCLP	127	Kepon	0.0011	0.13	199	Barium	1.2	7.6mg/l TCLP			
056	o,p'-DDD	0.023	0.087	128	Methacrylonitrile	0.24	34	200	Beryllium	0.85	0.014mg/l TCLP			
057	p,p'-DDD	0.023	0.087	129	Methanol	5.6	0.75mg/l TCLP	201	Cadmium	0.69	0.19mg/l TCLP			
058	o,p'-DDE	0.031	0.087	130	Methapyrene	0.081	1.5	202	Chromium (Total)	2.77	0.86mg/l TCLP			
059	p,p'-DDE	0.031	0.087	131	Methoxychlor	0.25	0.18	203	Cyanide (Total)	1.2	550			
060	o,p'-DDT	0.0039	0.087	132	3-Methylcholanthrene	0.0055	15	204	Cyanide (Amenable)	0.88	30			
061	p,p'-DDT	0.0039	0.087	133	4,4-Methylene bis(2-chloroaniline)	0.5	30	205	Fluoride	35	NA			
062	Dibenz(a,h)anthracene	0.055	8.2	134	Methylene chloride	0.089	30	206	Lead	0.69	0.37mg/l TCLP			
063	Debenz(a,e)pyrene	0.061	NA	135	Methyl ethyl ketone	0.28	36	207	Mercury-Nonwastewater from Retort	NA	0.20mg/l TCLP			
064	1,2-Dibromo-3-chloropropane	0.11	15	136	Methyl isobutyl ketone	0.14	33	208	Mercury-All Others	0.15	0.025mg/l TCLP			
065	1,2-Dibromomethane/ethylene dibromide	0.028	15	137	Methyl methacrylate	0.14	160	209	Nickel	3.98	5.0mg/l TCLP			
066	Dibromomethane	0.11	15	138	Methyl methanesulfonate	0.018	NA	210	Selenium	0.82	0.16mg/TCLP			
067	m-Dichlorobenzene	0.036	6	139	Methyl parathion	0.014	4.6	211	Silver	0.43	0.30mg/l TCLP			
068	o-Dichlorobenzene	0.088	6	140	Naphthalene	0.059	5.6	212	Sulfide	14	NA			
069	p-Dichlorobenzene	0.09	6	141	2-Naphthylamine	0.52	NA	213	Thallium	1.4	0.078mg/l TCLP			
070	Dichlorodifluoromethane	0.23	7.2	142	o-Nitroaniline	0.27	14	214	Vanadium	4.3	0.23mg/l TCLP			
071	1,1-Dichloroethane	0.059	6	143	p-Nitroaniline	0.028	28	215	Zinc	2.61	5.3mg/l TCLP			
072	1,2-Dichloroethane	0.21	6	144	Nitrobenzene	0.068	14							



Pacific
Resource
Recovery

3150 East Pico Boulevard, Los Angeles, CA 90023
Phone (800) 499-7145 Fax (213) 780-0078

LAND DISPOSAL RESTRICTION NOTIFICATION

Manifest Line #	Approval #	Manifest Line #	Approval #	Manifest Line #	Approval #
1	28060111				

This notification form shall be completed by the generator and shall accompany each shipment of restricted waste subject to the Land Disposal Restrictions (40 CFR 268 Subpart C).

- Complete all information in Section I.
- Check mark all appropriate Regulated Constituents in Section II, additional applicable Sections and/or complete Section III.
- Sign and date Section IV.

SECTION I

GENERATOR'S NAME	Space Exploration Tech.						
EPA I.D. NUMBER	CAB00019153L2						
MANIFEST NUMBER	000697814JJK						
TREATABILITY GROUP	(Check one) <input type="checkbox"/> Wastewater <input checked="" type="checkbox"/> Non-Wastewater						
HAZARDOUS DEBRIS	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No						
EPA HAZARDOUS WASTE CODE(S) -							
D001	F003	F005					
<input type="checkbox"/> There are no underlying hazardous constituents of concern, or							
<input checked="" type="checkbox"/> There are underlying hazardous constituents of concern which do not meet the treatment standards of 40 CFR 268.48, Table UTS - Universal Treatment Standards (see Section II).							
I have used the following to make the above determination:							
<input checked="" type="checkbox"/> Knowledge of the waste producing process, raw materials used and reaction products, or							
<input type="checkbox"/> Results of analysis for the constituents in Table UTS.							
Waste analysis data attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No							

NON-RCRA WASTE ☐ LIQUID ☐ SOLID

Effective 1/31/96 -

Pursuant to Section 25179.6 of the Health and Safety Code, NON-RCRA aqueous and solid waste containing organics has been repealed from Land Disposal Restriction Notification requirements.

(Check all that apply)

☐ 11a ☐ 11b ☐ 11c ☐ 11d

☐ other (28a - 28i)

--	--	--	--	--	--	--	--	--	--

UNIVERSAL TREATMENT STANDARDS

SECTION II

The Underlying Hazardous Constituents must be identified for waste streams which carry the EPA Waste Codes F001-F005, F039, D001 (only D001 not treated by RORGs; CMBST or POLYM), D005-D043 (only D005-D043 if treated in Non-CWA, Non-CWA equivalent or Non-SDWA facilities).

The wastes identified on the aforementioned manifest document number and bearing the EPA Hazardous Waste Number(s) identified in Section I are subject to the Land Disposal Restrictions of 40 CFR 268 Subpart C. The wastes do not meet the applicable treatment standards specified in 40 CFR 268 Subpart D or exceeds the applicable prohibition levels specified in 40 CFR 268.32 (California list wastes) or RCRA Section 3004(d). In compliance with the requirements of 40 CFR 268.7 and 268.9 we are indicating below the applicable constituents of concern.

40 CFR 268.48 TABLE UTS - UNIVERSAL TREATMENT STANDARDS (Continued)

Regulated constituent - common name	CAS ¹ NO.	Wastewater standard concentration in mg/l ²	Non-wastewater standard concentration in mg/kg ³ unless noted as "mg/l TCLP"	Regulated constituent - common name	CAS ¹ NO.	Wastewater standard concentration in mg/l ²	Non-wastewater standard concentration in mg/kg ³ unless noted as "mg/l TCLP"	Regulated constituent - common name	CAS ¹ NO.	Wastewater standard concentration in mg/l ²	Non-wastewater standard concentration in mg/kg ³ unless noted as "mg/l TCLP"
□ Acenaphthylene	208-96-8	0.059	3.4	□ m-Dichlorobenzene	541-73-1	0.036	6	□ p-Nitroaniline	100-01-6	0.028	28
□ Acenaphthene	83-32-9	0.059	3.4	□ o-Dichlorobenzene	95-50-1	0.088	6	□ o-Nitroaniline	88-74-4	0.27	14
□ Acetone	67-64-1	0.28	160	□ p-Dichlorobenzene	106-46-7	0.090	6	□ Nitrobenzene	98-95-3	0.068	14
□ Acetonitrile	75-05-8	5.6	1.8	□ Dichlorodifluoromethane	75-71-6	0.23	7.2	□ 5-Nitro-o-toluidine	99-55-8	0.32	28
□ Acetophenone	96-86-2	0.010	9.7	□ 1,1-Dichloroethane	75-34-3	0.059	6	□ o-Nitrophenol	88-75-5	0.28	13
□ 2-Acetylaminofluorene	53-96-3	0.059	140	□ 1,2-Dichloroethane	107-06-2	0.21	6	□ p-Nitrophenol	100-02-7	0.12	29
□ Acrolein	107-02-8	0.29	NA	□ 1,1-Dichloroethylene	75-34-4	0.025	6	□ N-Nitrosodimethylamine	55-18-5	0.40	28
□ Acrylamide	79-06-1	19	23	□ trans-1,2-Dichloroethylene	156-60-5	0.054	30	□ N-Nitrosodimethylamine	62-75-9	0.40	2.3
□ Acrylonitrile	107-13-1	0.24	84	□ 2,4-Dichlorophenol	120-83-2	0.044	14	□ N-Nitroso-di-n-butylamine	924-18-3	0.40	17
□ Aldrin	309-00-2	0.021	0.066	□ 2,6-Dichlorophenol	87-65-0	0.044	14	□ N-Nitrosomethylthylamine	10595-95-6	0.40	2.3
□ 4-Aminobiphenyl	92-67-1	0.13	NA	□ 1,2-Dichloropropane	78-87-5	0.85	18	□ N-Nitrosomorpholine	59-89-2	0.40	2.3
□ Aniline	62-53-3	0.81	14	□ cis-1,3-Dichloropropylene	10061-01-5	0.036	18	□ N-Nitrosopiperidine	100-75-4	0.013	35
□ Anthracene	120-12-7	0.059	3.4	□ trans-1,3-Dichloropropylene	10061-02-6	0.036	18	□ N-Nitrosopyrrolidine	930-55-2	0.013	35
□ Aramite	140-57-8	0.36	NA	□ Dieldrin	60-57-1	0.017	0.13	□ Parathion	55-38-2	0.014	4.6
□ alpha-BHC	319-84-6	0.00014	0.066	□ Diethyl phthalate	84-66-2	0.20	28	□ Pentachlorobenzene	608-93-5	0.055	10
□ beta-BHC	319-85-7	0.00014	0.066	□ p-Dimethylaminoazobenzene	60-11-7	0.13	NA	□ Pentachlorodibenzo-furans	NA	0.000035	0.001
□ delta-BHC	319-86-8	0.023	0.066	□ 2,4-Dimethyl phenol	105-67-9	0.036	14	□ Pentachlorodibenzo-p-dioxins	NA	0.000063	0.001
□ gamma-BHC	58-89-9	0.0017	0.066	□ Dimethyl phthalate	131-11-3	0.047	28	□ Pentachloroethane	76-01-7	0.055	6
□ Benz(a)anthracene	56-55-3	0.059	3.4	□ Di-n-butyl phthalate	84-74-2	0.057	28	□ Pentachloronitrobenzene	82-68-8	0.055	4.8
□ Benzal chloride	98-87-3	0.055	6.0	□ 1,4-Dinitrobenzene	100-25-4	0.32	2.3	□ Pentachlorophenol	87-86-5	0.089	7.4
□ Benzene	71-43-2	0.14	10	□ 4,6-Dinitro-o-cresol	534-52-1	0.28	160	□ Phenacetin	62-44-2	0.081	16
□ Benzo(a)pyrene	50-32-8	0.061	3.4	□ 2,4-Dinitrophenol	51-28-5	0.12	160	□ Phenanthrene	85-01-8	0.059	5.6
□ Benzo(b)fluoranthene	205-99-2	0.11	6.8	□ 2,4-Dinitrotoluene	121-14-2	0.32	140	□ Phenol	108-95-2	0.039	6.2
□ Benzo(g,h,i)perylene	191-24-2	0.0055	1.8	□ 2,6-Dinitrotoluene	606-20-2	0.55	28	□ Phorate	298-02-2	0.021	4.6
□ Benzo(k)fluoranthene	207-08-9	0.11	6.8	□ Di-n-octyl phthalate	117-84-0	0.017	28	□ Phthalic acid	100-21-0	0.055	28
□ bis-(2-Chloroethoxy) methane	111-91-1	0.036	7.2	□ Di-n-propylnitrosamine	621-64-7	0.40	14	□ Phthalic anhydride	85-44-9	0.055	28
□ bis-(2-Chloroethyl) ether	111-44-4	0.033	6.0	□ Diphenylamine	122-39-4	0.92	13	□ Pronamide	23950-58-5	0.093	1.5
□ bis-(Chloroisopropyl) ether	108-60-1	0.055	7.2	□ 1,2-Diphenylhydrazine	122-66-7	0.087	NA	□ Propanenitrile (Ethyl cyanide)	107-12-0	0.24	360
□ bis-(Ethylhexyl) phthalate	117-81-7	0.28	28	□ Diphenylnitrosamine	86-30-6	0.92	13	□ Pyrene	129-00-0	0.067	8.2
□ Bromodichloromethane	75-27-4	0.35	15	□ 1,4-Dioxane	123-91-1	NA	170	□ Pyridine	110-86-1	0.014	16
□ Bromomethane (methyl bromide)	74-83-9	0.11	15	□ p-Dimethylaminoazobenzene	60-11-7	0.13	NA	□ Salrole	94-59-7	0.081	22
□ 4-Bromophenyl phenyl ether	101-55-3	0.055	15	□ Disulfoton	298-04-4	0.017	6.2	□ Silver (2,4,5-TP)	93-72-1	0.72	7.9
□ n-Butyl alcohol	71-36-3	5.6	2.6	□ Endosulfan I	939-98-8	0.023	0.066	□ 2,4,5-T	93-76-5	0.72	7.9
□ Butyl benzyl phthalate	85-68-7	0.017	28	□ Endosulfan II	33213-6-5	0.029	0.13	□ 1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
□ 2-sec-Butyl-4,6-dinitrophenol diisobut	88-85-7	0.066	2.5	□ Endosulfan sulfate	1-31-07-8	0.029	0.13	□ Tetrachlorodibenzo-furans	NA	0.000063	0.001
□ Carbon disulfide	75-15-0	3.8	4.8 TCLP	□ Endrin	72-20-8	0.0028	0.13	□ Tetrachlorodibenzo-p-dioxins	NA	0.000063	0.001
□ Carbon tetrachloride	56-23-5	0.057	6.0	□ Endrin aldehyde	7421-93-4	0.025	0.13	□ 1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
□ Chlordane (alpha & gamma isomers)	57-74-9	0.0033	0.26	□ Ethyl acetate	141-78-6	0.34	33	□ 1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
□ p-Chloroaniline	106-47-8	0.46	16	□ Ethyl benzene	100-41-4	0.057	10	□ Tetrachloroethylene	127-18-4	0.056	6.0
□ Chlorobenzene	108-90-7	0.057	6.0	□ Ethyl ether	60-29-7	0.12	160	□ 2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
□ Chlorobenzilate	510-15-6	0.10	NA	□ Ethyl methacrylate	97-63-2	0.14	160	□ Toluene	108-88-3	0.080	10
□ 2-Chloro-1,3-butadiene	126-99-8	0.057	0.28	□ Ethylene oxide	75-21-8	0.12	NA	□ Toxaphene	8001-35-2	0.0095	2.6
□ Chlorodibromomethane	124-48-1	0.057	15	□ Fampur	52-85-7	0.017	15	□ Tribromomethane (bromofom)	75-25-2	0.63	15
□ Chloroethane	75-00-3	0.27	6.0	□ Fluoranthene	206-44-0	0.068	3.4	□ 1,2,4-Trichlorobenzene	120-82-1	0.055	19
□ Chloroform	67-66-3	0.046	6.0	□ Fluorene	86-73-7	0.059	3.4	□ 1,1,1-Trichloroethane	71-55-6	0.054	6.0
□ p-Chloro-m-cresol	59-50-7	0.018	14	□ Heptachlor	76-44-8	0.0012	0.066	□ 1,1,2-Trichloroethane	79-00-5	0.054	6.0
□ 2-Chloroethyl vinyl ether	110-75-8	0.062	NA	□ Heptachlor epoxide	1024-57-3	0.016	0.066	□ Trichloroethylene	79-01-6	0.054	6.0
□ Chloromethane (methyl chloride)	74-87-3	0.19	30	□ Hexachlorobenzene	118-74-1	0.055	10	□ Trichloromonofluoromethane	75-69-4	0.020	30
□ 2-Chloronaphthalene	91-8-7	0.055	5.6	□ Hexachlorobutadiene	87-68-3	0.055	5.6	□ 2,4,5-Trichlorophenol	95-95-4	0.18	7.4
□ 2-Chlorophenol	95-57-8	0.044	5.7	□ Hexachlorodibenzo-furans	NA	0.000063	0.001	□ 2,4,6-Trichlorophenol	88-06-2	0.035	7.4
□ 3-Chloropropylene	107-05-1	0.036	30	□ Hexachlorodibenzo-p-dioxins	NA	0.000063	0.001	□ 1,2,3-Trichloropropane	96-18-4	0.85	30
□ Chrysene	218-01-9	0.059	3.4	□ Hexachlorocyclopentadiene	77-47-4	0.057	2.4	□ 1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.057	30
□ p-Cresol	106-44-5	0.77	5.6	□ Hexachloroethane	67-72-1	0.055	30	□ Vinyl chloride	75-01-4	0.27	6.0
□ m-Cresol	108-39-4	0.77	5.6	□ Hexachloropropylene	1888-71-7	0.035	30	□ Xylenes (total)	1330-20-7	0.32	30
□ o-Cresol	95-48-7	0.11	5.6	□ Indene (1,2,3-c.d)pyrene	193-39-5	0.0055	3.4	□ Total PCBs	1336-36-3	0.1	10
□ Cyclohexanone	108-94-1	0.36	0.75 TCLP	□ Iodomethane	74-88-4	0.19	65	□ Antimony	7440-36-0	1.9	0.07 TCLP
□ 2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	0.72	10	□ Isobutyl alcohol	78-83-1	5.6	170	□ Arsenic	7440-38-2	1.4	5.0 TCLP
□ o,p'-DDD	53-19-0	0.023	0.087	□ Isodrin	465-73-6	0.021	0.066	□ Barium	7440-39-3	1.2	21 TCLP
□ p,p'-DDD	72-54-8	0.023	0.087	□ Isosafrole	120-58-1	0.081	2.6	□ Beryllium	7440-41-7	0.82	0.02 TCLP
□ o,p'-DDE	3424-82-6	0.031	0.087	□ Kepone	143-50-8	0.0011	0.13	□ Cadmium	7440-43-9	0.69	0.2 TCLP
□ p,p'-DDE	72-55-9	0.031	0.087	□ Methacrylonitrile	126-98-7	0.24	84	□ Chromium (total)	7440-47-3	2.77	0.85 TCLP
□ o,p'-DDT	789-02-6	0.0039	0.087	□ Methanol	67-56-1	5.6	0.75 TCLP	□ Cyanide (total)	57-12-5	1.2	590 ⁴
□ p,p'-DDT	50-29-3	0.0039	0.087	□ Methapyrene	91-80-5	0.081	1.5	□ Cyanide (amenable)	57-12-5	0.86	30 ⁴
□ Dibenzo(a,e)pyrene	192-85-4	0.061	NA	□ Methoxychlor	72-43-5	0.25	0.18	□ Fluoride	16964-48-8	35	NA
□ Dibenzo(a,h)anthracene	53-70-3	0.055	8.2	□ 3-Methylchloanthrene	56-49-5	0.0055	15	□ Lead	7439-92-1	0.69	0.75 TCLP
□ Iridis-(2,3-Dibromopropyl) phosphate	126-72-7	0.11	0.10	□ 4,4-Methylene-bis-(2-chloroaniline)	101-14-4	0.50	30	□ Mercury - NWW from Retort	7439-97-6	0.15	0.20 TCLP
□ 1,2-Dibromo-3-Chloropropane	96-12-8	0.11	15	□ Methylene chloride	75-09-2	0.089	30	□ Mercury - all others	7439-97-6	0.15	0.025 TCLP
□ 1,2-Dibromomethane (ethylene dibromide)	106-93-4	0.028	15	□ Methyl ethyl ketone	78-93-3	0.28	36	□ Nickel	7440-02-0	3.98	13.6 TCLP
□ Dibromomethane	74-95-3	0.11	15	□ Methyl isobutyl ketone	108-10-1	0.14	33	□ Selenium ⁵	7782-49-2	0.82	5.7 TCLP
				□ Methyl methacrylate	80-62-6	0.14	160	□ Silver	7440-22-4	0.43	0.11 TCLP
				□ Methyl methanesulfonate	66-27-3	0.018	NA	□ Sulfide	8496-25-8	14.0	NA
				□ Methyl Parathion	298-00-0	0.014	4.6	□ Thallium	7440-28-0	1.4	0.20 TCLP
				□ Naphthalene	91-20-3	0.059	5.6	□ Vanadium ⁶	7440-62-2	4.3	1.6 TCLP
				□ 2-Naphthylamine	91-59-8	0.52	NA	□ Zinc ⁴	7440-66-6	2.61	4.3 TCLP

40 CFR 268.48 TABLE UTS – UNIVERSAL TREATMENT STANDARDS (Continued)

¹CAS means Chemical Abstract Services. When the waste code and/or regulated constituents are described as a combination of a chemical with its salts and/or esters, the CAS number is given for the parent compound only.

²Concentration standards for wastewaters are expressed in mg/l are based on analysis of composite samples.

³Except for Cyanides (Total and Amenable) the non-wastewater treatment standards expressed as a concentration were established, in part, based upon incineration in units operated in accordance with the technical requirements of 40 CFR part 264, subpart O or 40 CFR part 265, subpart O, or based upon combustion in fuel substitution units operating in accordance with applicable technical requirements. A facility may comply with these treatments standards according to provisions in 40 CFR 268.40(d). All concentration standards for nonwastewaters are based on analysis of grab samples.

⁴Both Cyanides (Total) and Cyanides (Amenable) for non-wastewaters are to be analyzed using Method 9010 or 9012, found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication SW-846, as incorporated by reference in 40 CFR 260.11, with a sample size of 10 grams and a distillation time of one hour and 15 minutes.

⁵These constituents are not "underlying hazardous constituents" in characteristic wastes, according to the definition at §268.2 (i).

⁶Between August 26, 1996, and August 26, 1997, these constituents are not "underlying hazardous constituents" as defined at §268.2 (i) of this Part.

Note: NA means not applicable.

Please complete as applicable:

Wastes with organic constituents having treatment standards expressed as concentration levels based in whole or in part on the analytical detection limit alternative specified in §268.40(d).

- ☐ I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the non-wastewater organic constituents have been treated by combustion units as specified in 268.42, Table 1. I have been unable to detect the non-wastewater organic constituents, despite having used best good-faith efforts to analyze for such constituents. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

Wastes with treatment standards expressed as concentrations in the waste extract Toxicity Characteristic Leaching Procedure (TCLP).

- ☐ I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the treatment standards specified in 40 CFR 268.40 without impermissible dilution of the prohibited waste. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

☐ Alternative Treatment Standard Lab Pack

Manifest Line No.

- ☐ I certify under penalty of law that I personally have examined and am familiar with the waste and that the lab pack contains only wastes that have not been excluded under Appendix IV to 40 CFR Part 268 and that this lab pack will be sent to a combustion facility in compliance with the alternative treatment standards for lab packs at 40 CFR 268.42(c). I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment.

- ☐ I hereby certify under penalty of law that there are no PCBs (polychlorinated biphenyls) contained in the oil waste being manifested to Pacific Resource Recovery. I also understand that a sample of the load will be retained and that the generator will be responsible for the clean-up of contaminated equipment, tanks, etc. if PCBs are present in the waste.

Benzene NESHAP Control Requirement:

For Chemical Manufacturers, Petroleum Refineries, Coke By-Product Facilities and RCRA TSDFs handling wastes subject to 40 CFR 61 subpart FF ONLY:

- ☐ This waste is a "Controlled Benzene Waste" which is subject to the notification requirements of 40 CFR 61 Subpart FF.

Manifest Line No.

California List Wastes:

- ☐ Liquid hazardous wastes having a pH less than or equal to 2.0
- ☐ Liquid hazardous wastes containing PCBs at a concentration greater than or equal to 50 ppm
- ☐ Liquid hazardous wastes that contain HOCs in total concentration greater than or equal to 1000 mg/l
- ☐ Nonliquid hazardous wastes containing HOCs in total concentration greater than or equal to 1000 mg/kg
- ☐ Free (amenable to chlorination) cyanides greater than or equal to 1000 mg/l
- ☐ One or more of the following metals greater than or equal to the following:
- Arsenic and/or compounds: 500 mg/l
 - Cadmium and/or compounds: 100 mg/l
 - Chromium and/or compounds: 500 mg/l
 - Lead and/or compounds: 500 mg/l
 - Mercury and/or compounds: 20 mg/l
 - Nickel and/or compounds: 134 mg/l
 - Selenium and/or compounds: 100 mg/l
 - Thallium and/or compounds: 130 mg/l



ADDITIONAL RESTRICTED WASTE IDENTIFICATION/ TREATMENT STANDARDS AND CERTIFICATION FORM

Complete Section III if the restricted wastes (i.e., EPA Hazardous Waste Code) as listed in Section I do not meet the applicable treatment standards in 40 CFR 268.40 (Treatment Standards for Hazardous Wastes) and have not been identified as required in Section II.

[illegible]

Company Name:

Authorized Signature

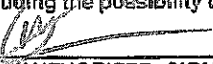
Printed Name:

Date:

Siemens Water Technologies Corp.

LAND DISPOSAL RESTRICTION NOTIFICATION FORM


Pursuant to CCR Title 22, Section 66268.7(40 CFR 268.7(a)), I hereby notify that this waste shipment contains one or more of the following wastes restricted under the land disposal restrictions for which applicable treatment standards are set forth in CCR Title 22, Section 66268.40 (40 CFR 268.40)

Manifest Num. 000697019JJK		Generator Name: Space Exploration		EPA#		CAR000191536																	
RCRA HAZARDOUS WASTE INFORMATION																							
U.S.F. PROFILE NUMBER/MANIFEST LINE ITEM NUMBER	List all D, F, K, U & P Codes	Subcategory (IF ANY)	WASTEWATER/ NONWASTEWATER WW NWW		California List ** Per CCR Title 22, Section 66268.32	Hazardous Debris Subject To CCR Title 22, Sec 66268.45																	
1)	D001		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>																	
2)	D001		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>																	
3)	D001		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>																	
4)	D001		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>																	
ADDITIONAL INFORMATION FOR D001, D002, D012-43, F001-5 & F039 WASTE STREAMS: (check one) <input checked="" type="checkbox"/> There are no underlying hazardous constituents (UHCs) present <input type="checkbox"/> There are underlying hazardous constituents (UHCs) present which do not meet treatment standards per CCR Title 22, Section 66268.48 (Use the attached UTS Table and check the appropriate constituent(s) present in the waste stream)																							
DETERMINATION BASED UPON: (check one) <input checked="" type="checkbox"/> Knowledge of the process generating the waste and the raw materials used and the reaction products <input type="checkbox"/> Results from analytical testing Analytical results attached <input type="checkbox"/> YES <input type="checkbox"/> NO																							
TERM DEFINITIONS: * WASTEWATER = per CCR Title 22, Section 66260.10, WASTE THAT CONTAINS LESS THAN 1% BY WEIGHT TOTAL TOXIC ORGANICS (TOCs) AND 1% BY WEIGHT TOTAL SUSPENDED SOLIDS (TSS). * CALIFORNIA LIST = THE FOLLOWING HAZARDOUS WASTES ARE PROHIBITED FROM LAND DISPOSAL: per CCR Title 22, Section 66268.32																							
<ul style="list-style-type: none"> Liquid hazardous waste with a pH less than or equal to 2.0 Liquid hazardous waste containing PCB's at concentration of greater than or equal to 50 ppm Liquid hazardous waste, including free liquids associated with any solids/sludge, containing free cyanide at concentrations greater than or equal to 1,000 mg/L Liquid hazardous waste, including free liquids associated with any solids/sludge, containing metals at concentrations greater than or equal to the following: <table border="1"> <tr> <td>ARSENIC</td> <td>500 mg/L</td> <td>MERCURY</td> <td>20 mg/L</td> </tr> <tr> <td>CADMIUM</td> <td>100 mg/L</td> <td>NICKEL</td> <td>134 mg/L</td> </tr> <tr> <td>CHROMIUM</td> <td>500 mg/L</td> <td>SELENIUM</td> <td>100 mg/L</td> </tr> <tr> <td>LEAD</td> <td>500 mg/L</td> <td>THALLIUM</td> <td>130 mg/L</td> </tr> </table> Liquid hazardous waste, that contains HOC's in total concentration greater than or equal to 1,000 mg/L Non-liquid RCRA hazardous waste containing HOC's in total concentration greater than or equal to 1,000 mg/L 								ARSENIC	500 mg/L	MERCURY	20 mg/L	CADMIUM	100 mg/L	NICKEL	134 mg/L	CHROMIUM	500 mg/L	SELENIUM	100 mg/L	LEAD	500 mg/L	THALLIUM	130 mg/L
ARSENIC	500 mg/L	MERCURY	20 mg/L																				
CADMIUM	100 mg/L	NICKEL	134 mg/L																				
CHROMIUM	500 mg/L	SELENIUM	100 mg/L																				
LEAD	500 mg/L	THALLIUM	130 mg/L																				
CERTIFICATION I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification. I believe that the information I have submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment. SOS for Space Exploration																							
COMPANY NAME		 AUTHORIZED SIGNATURE				08/20/08 DATE																	

Siemens Water Technologies Corp.

LAND DISPOSAL RESTRICTION NOTIFICATION FORM

Pursuant to CCR Title 22, Section 66268.7(40 CFR 268.7(a)), I hereby notify that this waste shipment contains one or more of the following wastes restricted under the land disposal restrictions for which applicable treatment standards are set forth in CCR Title 22, Section 66268.40 (40 CFR 268.40)

Manifest Num. 000697921.JJK		Generator Name : Space Exploration		EPA#		CAR000191536																	
RCRA HAZARDOUS WASTE INFORMATION																							
U.S.F. PROFILE NUMBER/MANIFEST LINE ITEM NUMBER	List all D, F, K, U & P Codes	Subcategory (IF ANY)	WASTEWATER/ NONWASTEWATER WW NWW		California List ** Per CCR Title 22, Section 66268.32	Hazardous Debris Subject To CCR Title 22, Sec 66268.45																	
1)P177614	D002,D007		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>																	
2)AP169390	D006,D007		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>																	
3)			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>																	
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> For: _____	<input type="checkbox"/>																	
ADDITIONAL INFORMATION FOR D001, D002, D012-43, F001-5 & F039 WASTE STREAMS: (check one) <input checked="" type="checkbox"/> There are no underlying hazardous constituents (UHCs) present <input type="checkbox"/> There are underlying hazardous constituents (UHCs) present which do not meet treatment standards per CCR Title 22, Section 66268.48 (Use the attached UTS Table and check the appropriate constituent(s) present in the waste stream)																							
DETERMINATION BASED UPON : (check one) <input checked="" type="checkbox"/> Knowledge of the process generating the waste and the raw materials used and the reaction products <input type="checkbox"/> Results from analytical testing Analytical results attached <input type="checkbox"/> YES <input type="checkbox"/> NO																							
TERM DEFINITIONS: * WASTEWATER = per CCR Title 22, Section 66260.10, WASTE THAT CONTAINS LESS THAN 1% BY WEIGHT TOTAL TOXIC ORGANICS (TOCs) AND 1% BY WEIGHT TOTAL SUSPENDED SOLIDS (TSS). * CALIFORNIA LIST = THE FOLLOWING HAZARDOUS WASTES ARE PROHIBITED FROM LAND DISPOSAL: per CCR Title 22, Section 66268.32																							
<ul style="list-style-type: none"> Liquid hazardous waste with a pH less than or equal to 2.0 Liquid hazardous waste containing PCB's at concentration of greater than or equal to 50 ppm Liquid hazardous waste, including free liquids associated with any solids/sludge, containing free cyanide at concentrations greater than or equal to 1,000 mg/L Liquid hazardous waste, including free liquids associated with any solids/sludge, containing metals at concentrations greater than or equal to the following: <table border="1"> <tr> <td>ARSENIC</td> <td>500 mg/L</td> <td>MERCURY</td> <td>20 mg/L</td> </tr> <tr> <td>CADMIUM</td> <td>100 mg/L</td> <td>NICKEL</td> <td>134 mg/L</td> </tr> <tr> <td>CHROMIUM</td> <td>500 mg/L</td> <td>SELENIUM</td> <td>100 mg/L</td> </tr> <tr> <td>LEAD</td> <td>500 mg/L</td> <td>THALLIUM</td> <td>130 mg/L</td> </tr> </table> Liquid hazardous waste, that contains HOC's in total concentration greater than or equal to 1,000 mg/L Non-liquid RCRA hazardous waste containing HOC's in total concentration greater than or equal to 1,000 mg/L 								ARSENIC	500 mg/L	MERCURY	20 mg/L	CADMIUM	100 mg/L	NICKEL	134 mg/L	CHROMIUM	500 mg/L	SELENIUM	100 mg/L	LEAD	500 mg/L	THALLIUM	130 mg/L
ARSENIC	500 mg/L	MERCURY	20 mg/L																				
CADMIUM	100 mg/L	NICKEL	134 mg/L																				
CHROMIUM	500 mg/L	SELENIUM	100 mg/L																				
LEAD	500 mg/L	THALLIUM	130 mg/L																				
CERTIFICATION I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification. I believe that the information I have submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment. SOS for Space Exploration																							
COMPANY NAME				 AUTHORIZED SIGNATURE		08/20/08 DATE																	



*Rho Chem Corporation,
a wholly owned subsidiary of PHILIP SERVICES CORP.,
RCRA Land Disposal Restriction Notification Form EZ*

Generator: SPACEX
Profile #: 39051500, 390514-00

U.S. EPA I.D. #: CA0000191536
Manifest #: 000697935 JJK

The wastes identified on this form are subject to the land disposal restrictions of 40 CFR Part 268. The wastes do not meet the treatment standards specified in 268.32, Subpart D or do not meet the applicable prohibition levels specified in 268.32. Pursuant to 40 CFR 268.7(a), the required information applicable to each is identified below (check all boxes that apply):

Treatability Group: ☐ Wastewater ☒ Nonwastewater
(Wastewaters contain less than 1% filterable solids and less than 1% Total Organic Carbon)

- ☒ D001 Ignitable (except for High TOC) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems
(Complete form UC, unless D001 is the only "D" code and the waste is to be combusted or recovered.)
- ☐ D001 Ignitable (except for High TOC) managed in CWA/ CWA-equivalent/Class I SDWA systems
- ☐ D001 High TOC Ignitable (greater than 10% total organic carbon)
- ☐ D002 Corrosive managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems (Complete form UC)
- ☐ D002 Corrosive managed in CWA/ CWA-equivalent/Class I SDWA systems
- ☐ D003 Reactive Sulfides based on 261.23(a)(5)
- ☐ D003 Reactive Cyanides based on 261.23(a)(5)
- ☐ D003 Water Reactives based on 261.23(a)(2),(3) and (4) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems (Complete form UC)
- ☐ D003 Water Reactives based on 261.23(a)(2),(3) and (4) managed in CWA/ CWA-equivalent/Class I SDWA systems
- ☐ D003 Other Reactives based on 261.23(a)(1) (Complete form UC)

If D004-43 boxes are checked, complete and attach Form UC to address underlying hazardous constituents (unless these wastes are to be managed in CWA/CWA-equivalent/C SDWA systems):

- | | | | |
|--|--|---|--|
| <input type="checkbox"/> D004 Arsenic | <input type="checkbox"/> D005 Barium | <input type="checkbox"/> D006 Cadmium | <input type="checkbox"/> D006 Cadmium-containing batteries |
| <input type="checkbox"/> D007 Chromium | <input type="checkbox"/> D008 Lead | <input type="checkbox"/> D008 Lead acid batteries | |
| <input type="checkbox"/> D009 High mercury inorganic (>260 mg/kg total), including incinerator residue and residues from RMERC | | | |
| <input type="checkbox"/> D009 High-mercury organic (>260 mg/kg total), not including incinerator residue | | | |
| <input type="checkbox"/> D009 Low-mercury (<260 mg/kg total) | | <input type="checkbox"/> D009 All D009 wastewaters | |
| <input type="checkbox"/> D010 Selenium | <input type="checkbox"/> D011 Silver | | |
| <input type="checkbox"/> D012 Endrin | <input type="checkbox"/> D023 o-Cresol | <input type="checkbox"/> D033 Hexachlorobutadiene | |
| <input type="checkbox"/> D013 Lindane | <input type="checkbox"/> D024 m-Cresol | <input type="checkbox"/> D034 Hexachloroethane | |
| <input type="checkbox"/> D014 Methoxychlor | <input type="checkbox"/> D025 p-Cresol | <input type="checkbox"/> D035 Methyl ethyl ketone | |
| <input type="checkbox"/> D015 Toxaphene | <input type="checkbox"/> D026 Cresols (Total) | <input type="checkbox"/> D036 Nitrobenzene | |
| <input type="checkbox"/> D016 2,4-D | <input type="checkbox"/> D027 p-Dichlorobenzene | <input type="checkbox"/> D037 Pentachlorophenol | |
| <input type="checkbox"/> D017 2,4,5-TP (Silvex) | <input type="checkbox"/> D028 1,2-Dichloroethane | <input type="checkbox"/> D038 Pyridine | |
| <input type="checkbox"/> D018 Benzene | <input type="checkbox"/> D029 1,1-Dichloroethylene | <input type="checkbox"/> D039 Tetrachloroethylene | |
| <input type="checkbox"/> D019 Carbon tetrachloride | <input type="checkbox"/> D030 2,4-Dinitrotoluene | <input type="checkbox"/> D040 Trichloroethylene | |
| <input type="checkbox"/> D020 Chlordane | <input type="checkbox"/> D031 Heptachlor | <input type="checkbox"/> D041 2,4,5-Trichlorophenol | |
| <input type="checkbox"/> D021 Chlorobenzene | <input type="checkbox"/> D032 Hexachlorobenzene | <input type="checkbox"/> D042 2,4,6-Trichlorophenol | |
| <input type="checkbox"/> D022 Chloroform | | <input type="checkbox"/> D043 Vinyl chloride | |

Note: If any bolded entries are checked, form UC must be completed to address underlying hazardous constituents, unless the material is treated in a Clean Water Act (CWA) treatment process or unless otherwise noted above.

In addition, the following wastes are included in this shipment:

- ☐ F001-F005 spent solvents. (If this box is checked, complete the F001-F005 section on the back of this form. Check the hazardous waste number(s) that applies, and identify the constituents likely to be present in the waste.)

If this shipment carries additional waste codes that are not addressed above, identify them here:

<u>EPA Waste Code</u>	<u>Subcategory (if applicable)</u>	<u>EPA Waste Code</u>	<u>Subcategory (if applicable)</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

F001-F005 Spent Solvents

Check the box(es) that applies; identify the individual constituents likely to be present.

Hazardous waste descriptionRegulated hazardous constituents

<input type="checkbox"/> F001 Spent halogenated solvents used in degreasing	Carbon tetrachloride Tetrachloroethylene Trichloroethylene Trichloromonofluoromethane	Methylene chloride 1,1,1-Trichloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane
<input type="checkbox"/> F002 Spent halogenated solvents	Chlorobenzene Methylene chloride 1,1,1-Trichloroethane Trichloroethylene Trichloromonofluoromethane	<i>o</i> -Dichlorobenzene Tetrachloroethylene 1,1,2-Trichloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane
<input type="checkbox"/> F003 Spent non-halogenated solvents	Acetone Cyclohexanone* Ethyl benzene Methanol* Xylenes (total)	<i>n</i> -Butyl alcohol Ethyl acetate Ethyl ether Methyl isobutyl ketone
<input type="checkbox"/> F004 Spent non-halogenated solvents	<i>m</i> -Cresol <i>p</i> -Cresol Nitrobenzene	<i>o</i> -Cresol Cresol-mixed isomers (cresylic acid)
<input type="checkbox"/> F005 Spent non-halogenated solvents	Benzene 2-Ethoxyethanol Methyl ethyl ketone Pyridine	Carbon disulfide* Isobutyl alcohol 2-Nitropropane Toluene

*The treatment standards for carbon disulfide, cyclohexanone, and methanol nonwastewaters are based on the TCLP and apply to spent solvent nonwastew. containing only one, two, or all three of these constituents. The treatment standards for these three constituents do not apply when any of the other F001-F constituents are present in the waste.

Hazardous Debris

- ☐ This shipment contains hazardous debris that will be treated to comply with the alternative treatment standards of 268.45 (e.g., macroencapsulation or al blasting).

(The definitions of "debris" and "hazardous debris" are in 40 CFR 268.2. Per 268.45, hazardous debris must be treated for each "contan subject to treatment." To determine these, look up the waste code in 268.40 and list the regulated hazardous constituents for each code.)

The contaminants subject to treatment for this debris are identified below:

<u>EPA Waste Code</u>	<u>Subcategory</u>	<u>Contaminants subject to treatment</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

*Rho Chem Corporation,
a wholly owned subsidiary of PHILIP SERVICES CORP.,
RCRA Land Disposal Restriction Notification Form UC*

Generator: SPACE X

U.S. EPA I.D. #: CAR 000191536

Profile #: _____

Manifest #: 000697935 JJK

In accordance with 40 CFR 268.7(a), the underlying hazardous constituents must be addressed in this waste. Per 268.2(i), "underlying hazardous constituent means any constituent listed in 268.48, Table UTS—Universal Treatment Standard which can reasonably be expected to be present at the point of generation of hazardous waste, at a concentration above the constituent-specific UTS treatment standard. Refer to Form-EZ (attached) for the waste code(s), treatability group and subcategory applicable to this waste.

In order to address underlying hazardous constituents in characteristic wastes, please check the appropriate box:

- ☒ I have reviewed the UTS list of 268.48, and per 268.7(a), I have determined that there are no underlying hazardous constituents reasonably expected to be present in this waste.
- ☐ I have reviewed the UTS list of 268.48, and per 268.7(a), I have determined that underlying hazardous constituents are present in this waste. The underlying hazardous constituents are identified as follows:

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

The determination of underlying hazardous constituents was based on:

☒ Generator's knowledge of the waste

☐ Analysis

I certify that I personally have examined and am familiar with the waste through analysis and testing, or through knowledge of the waste to support this certification. I certify that as an authorized representative of the generator named above, all the information submitted in this notification is true and correct to the best of my knowledge.

Printed Name _____

Signature _____

Date _____

List of Underlying Hazardous Constituents 40 CFR 268.48

Circle or otherwise identify the underlying hazardous constituents present in the waste:

Organic Constituent

A2213
Acenaphthylene
Acenaphthene
Aroclors)
Acetone
Acetonitrile
Acetophenone
2-Acetylaminofluorene
Acrolein
Acrylamide
Acrylonitrile
Aldicarb sulfone
Aldrin
4-Aminobiphenyl
Aniline
Anthracene
Aramite
alpha-BHC
beta-BHC
delta-BHC
gamma-BHC
Barban
Bendiocarb
Bendiocarb phenol
Benomyl
Benzene
Benz(a)anthracene
Benzal chloride
Benzo(b)fluoranthene
Benzo(k)fluoranthene
Benzo(g,h,i)perylene
Benzo(a)pyrene
Bromodichloromethane
Bromomethane/Methyl bromide
4-Bromophenyl phenyl ether
n-Butyl alcohol
Butylate
Butyl benzyl phthalate
2-sec-Butyl-4,6-dinitrophenol/Dinoseb
Carbaryl
Carbenzadim
Carbofuran
Carbofuran phenol
Carbon disulfide
Carbon tetrachloride
Carbosulfan
Chlordane (alpha and gamma isomers)
p-Chloroaniline
Chlorobenzene
Chlorobenzilate
2-Chloro-1,3-butadiene
Chlorodibromomethane
Chloroethane
bis(2-Chloroethoxy)methane
bis(2-Chloroethyl)ether
Chloroform
bis(2-Chloroisopropyl)ether
p-Chloro-m-cresol
2-Chloroethyl vinyl ether
Chloromethane/Methyl chloride concentrations)
2-Chloronaphthalene

Inorganic Constituent

Antimony
Arsenic
Barium
Beryllium

Organic Constituent

2-Chlorophenol
3-Chloropropylene
Chrysene

o-Cresol
m-Cresol
p-Cresol
m-Cumenyl methylcarbamate
Cyclohexanone
o,p'-DDD
p,p'-DDD
o,p'-DDE
p,p'-DDE
o,p'-DDT
p,p'-DDT
Dibenz(a,h)anthracene
Dibenz(a,e)pyrene
1,2-Dibromo-3-chloropropane
1,2-Dibromoethane/Ethylene dibromide
Dibromomethane
m-Dichlorobenzene
o-Dichlorobenzene
p-Dichlorobenzene
Dichlorodifluoromethane
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethylene
trans-1,2-Dichloroethylene
2,4-Dichlorophenol
2,6-Dichlorophenol
2,4-Dichlorophenoxyacetic acid/2,4-D
1,2-Dichloropropane
cis-1,3-Dichloropropylene
trans-1,3-Dichloropropylene
Dieldrin
Diethylene glycol, dicarbamate
Diethyl phthalate
p-Dimethylaminoazobenzene
2,4-Dimethyl phenol
Dimethyl phthalate
Dimetilan
Di-n-butyl phthalate
1,4-Dinitrobenzene
4,6-Dinitro-o-cresol
2,4-Dinitrophenol
2,4-Dinitrotoluene
2,6-Dinitrotoluene
Di-n-octyl phthalate
Di-n-propylnitrosamine
1,4-Dioxane
Diphenylamine
Diphenylnitrosamine
1,2-Diphenylhydrazine
Disulfoton
Dithiocarbamates (total)
Endosulfan I
Endosulfan II
Endosulfan sulfate
Endrin
Endrin aldehyde

EPTC

Inorganic Constituent

Cadmium
Chromium (Total)
Cyanides (Total)
Cyanides (Amenable)

Organic Constituent

Ethyl acetate
Ethyl benzene
Ethyl cyanide/Propanenitrile

Ethyl ether
bis(2-Ethylhexyl)phthalate
Ethyl methacrylate
Ethylene oxide
Famphur
Fluoranthene
Fluorene
Formetanate hydrochloride
Formparanate
Heptachlor
Heptachlor epoxide
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
HxCDDs(All Hexachlorodibenzo-p-dioxins)
HxCDFs(All Hexachlorodibenzofurans)
Hexachloroethane
Hexachloropropylene
Indeno(1,2,3-c,d)pyrene
Iodomethane
Isobutyl alcohol
Isodrin
Isolan
Isosafrole
Kepone
Methacrylonitrile
Methanol
Methapyrilene
Methiocarb
Methomyl
Methoxychlor
3-Methylcholanthrene
4,4-Methylene-bis(2-chloroaniline)
Methylene chloride
Methyl ethyl ketone
Methyl isobutyl ketone
Methyl methacrylate
Methyl methansulfonate
Methyl parathion
Metolcarb
Mexacarbate
Molinate
Naphthalene
2-Naphthylamine
o-Nitroaniline
p-Nitroaniline
Nitrobenzene
5-Nitro-o-toluidine
o-Nitrophenol
p-Nitrophenol
N-Nitrosodiethylamine
N-Nitrosodimethylamine
N-Nitroso-di-n-butylamine
N-Nitrosomethylethylamine
N-Nitrosomorpholine
N-Nitrosopiperidine

Inorganic Constituent

Lead
Mercury-Nonwastewater from Retort
Mercury-All Others
Nickel
N-Nitrosopyrrolidine

Organic Constituent

Oxamyl
Parathion
Total PCBs(sum of all isomers, or all

Pebulate

Pentachlorobenzene
PeCDDs(All Pentachlorodibenzo-p-dioxin
PeCDFs(All Pentachlorodibenzofurans)
Pentachloroethane
Pentachloronitrobenzene
Pentachlorophenol
Phenacetin
Phenanthrene

Phenol
o-Phenylenediamine
Phorate
Phthalic acid
Phthalic anhydride
Physostigmine
Physostigmine salicylate
Promecarb
Pronamide
Propham
Propoxur
Prosulfocarb
Pyrene
Pyridine
Safrole
Silvex/2,4,5-TP
1,2,4,5-Tetrachlorobenzene
TCDDs(All Tetrachlorodibenzo-p-dioxins)
TCDFs(All Tetrachlorodibenzofurans)
1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
Tetrachloroethylene
2,3,4,6-Tetrachlorophenol
Thiodicarb
Thiophanate-methyl
Tirpate
Toluene
Toxaphene
Triallate
Tribromomethane/Bromoform
2,4,6-Tribromophenol
1,2,4-Trichlorobenzene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethylene
Trichloromonofluoromethane
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
2,4,5-Trichlorophenoxyacetic acid/2,4,5-T
1,2,3-Trichloropropane
1,1,2-Trichloro-1,2,2-trifluoroethane
Triethylamine
tris-(2,3-Dibromopropyl)phosphate
Vernolate
Vinyl chloride
Xylenes-mixed isomers
(sum of o-, m-, and p-xylene

Inorganic Constituent

Silver
Sulfides
Thallium